@
HD1+11
11.ra

Cornell University Library
HD 1411.N6a
Outlines of agricultural economics; a cla
3 1924 013 715 622
mann

OUTLINES OF AGRICULTURAL ECONOMICS

A CLASS-BOOK OF QUESTIONS AND PROBLEMS

NOURSE

THE UNIVERSITY OF CHICAGO PRESS

Cornell University
Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

http://www.archive.org/details/cu31924013715622

MATERIALS FOR THE STUDY OF ECONOMICS

OUTLINES OF AGRICULTURAL ECONOMICS

THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILLINOIS

THE BAKER & TAYLOR COMPANY
NEW YORK

THE J. K. GILL COMPANY
PORTLAND

THE CUNNINGHAM, CURTISS & WELCH COMPANY
LOS ANGELES

THE CAMBRIDGE UNIVERSITY PRESS
LONDON AND EDINBURGH

THE MARUZEN-KABUSHIKI-KAISHA
TOKYO, OSAKA, KYOTO, FUKUOKA, SENDAI

THE MISSION BOOK COMPANY
SHANGHAI

OUTLINES OF AGRICULTURAL ECONOMICS

A CLASS-BOOK OF QUESTIONS AND PROBLEMS

By

EDWIN G. NOURSE

Professor of Economics, University of Arkansas

THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILLINOIS

Copyright 1917 By
The University of Chicago

All Rights Reserved

Published September 1917

Composed and Printed By
The University of Chicago Press
Chicago, Illinois, U.S.A.

PREFACE

This little book appears in fulfilment of the promise made a year ago that there would be a class-book to accompany *Agricultural Economics*. In fact, these questions and exercises should be regarded as an integral part of the earlier volume for all purposes of teaching and study. They should be bound together except for the undue size which would result and the possibility that some instructors might desire to use this class-book in connection with other materials. For this latter reason the writer has aimed to make the questions sufficiently general in character to be of value to classes using other textbooks than his own and especially to instructors or classes in marketing, rural credits, and similar special topics. While the questions bear in the main upon the particular matter presented in the companion volume, specific references have been avoided in nearly all cases.

The writer disclaims any pretense of offering a bibliography of agricultural economics. The lists of "additional references" appended to the various chapters are merely what their name implies—references added to those already suggested in the footnotes of the various selections. Some of these represent valuable material which has appeared since the publication of the earlier volume; others are works which for one reason or another were not used in the compilation of the source book, but which seem to the writer to be of value for further reading on special topics or in the preparation of term papers.

Likewise, the lists of special topics do not aim at completeness, but are intended, by a few concrete suggestions, to stimulate the student to discover suitable subjects of his own.

Besides the use which the writer has already made of this material, a part of the questions have been used at the University of Illinois by Dr. Charles L. Stewart, from whom numerous helpful suggestions have been received. Criticisms and suggestions from all who may use the book are cordially invited, in order that the book may be revised, at no distant date, in the light of a broader classroom experience.

E. G. N.

FAYETTEVILLE, ARKANSAS
July 2, 1917

CONTENTS

		PAGE
	Introduction	1
I.	The Emergence of the Problem of Agricultural Economics	3
II.	Consumption	7
III.	Land and Other Natural Agents of Agricultural Production	10
IV.	Human Effort as a Factor in Agricultural Production	16
V.	Capital-Goods as a Factor in Agricultural Production	20
VI.	Organization and Management of the Agricultural Enterprise	24
VII.	Records and Accounts as Measures of Efficient Management	29
VIII.	Principles of Value and Price as Related to Farm Products	32
IX.	Market Methods and Problems	42
X.	Transportation and Storage Facilities as Factors in the Marketing of Farm Products	51
XI.	The Rent and Value of Farm Land	58
XII.	Land Tenure and Land Policy	64
XIII.	Interest on Farm Loans	70
XIV.	Rural Credits	75
XV.	Agricultural Wages	82
XVI.	Some Problems of Agricultural Labor	87
XVII.	Profits in Agriculture	91
	Syllabus	94

INTRODUCTION

NOTE.—Unless the individual instructor suggests a different line of procedure, the student should pursue a systematic plan of study like the following: First, read the introduction of the chapter to be studied. Many points in the discussion will probably not be clear in this preliminary reading, but the student will get a certain perspective for the whole chapter, which it is desirable to have before undertaking the study of separate selections. In some cases it will doubtless be helpful to interrupt the reading of the chapter introduction long enough to turn over into the body of the chapter and read some selection or portion of a selection to which specific reference is being made.

The second step should consist in reading the chapter section by section, studying each in the light of the questions presented in the corresponding section of this question-book and of the suggestions contained in the chapter introduction.

Finally, these separate lines of thought should be drawn together into a somewhat integrated discussion of the whole situation or problem of which they are the component parts. For this purpose there is appended to each chapter in the class-book a section labeled "Problems." Many of these consist of quoted opinions which are submitted for the student's criticism. They are intended to show the practical guise in which he will later meet the problems of agricultural economics and to test his understanding of the principles which should aid him in solving them. At this stage of his study a re-reading of the chapter introduction is advised.

QUESTIONS

1. Look up several definitions of economics as contained in standard college texts in general economics. Can you, by the change of a few words, make one of them over into a satisfactory definition of agricultural economics?

2. Would it be sufficient to say that agricultural economics is a study of the price relationships of the farmer? What would be the object of such a study of price relationships?

3. Does the study of agricultural chemistry, physics, or biology give the scientifically trained farmer power to control natural forces and direct them to his own advantage?

4. Does the commercial experience of the last few decades seem to indicate that it is possible to identify and understand economic

forces so that we can rationally work with them and turn them to our personal or social gain?

5. A prominent banker has said that we are a nation of economic illiterates and that no other form of illiteracy is so dangerous in a republic. Can you show the truth of this statement as applied to a lack of economic intelligence among farmers?

6. Does economic well-being have any bearing upon political, social, and moral conditions in a community or nation?

I. THE EMERGENCE OF THE PROBLEM OF AGRICULTURAL ECONOMICS

QUESTIONS

1. Was the purpose of primitive man in domesticating plants or animals the securing of an economic gain?

2. Did he make his choice of species or individuals in accordance with considerations of maximum return from the minimum outlay? Was the savage greatly concerned about saving time? Why? Materials? Why?

3. Does it appear that in his choices the primitive man made serious blunders? Are we still undertaking the domestication of wild plants and animals? Why?

4. Were there economic reasons for the appearance of pastoral peoples? Did the pursuit of stock-raising necessitate that the persons so engaged be nomads?

5. Did pastoral life permit a raising of the standard of living above that of hunting peoples? Did it lead men naturally into a more advanced type of economic effort? Explain.

6. Did commerce grow up among pastoral peoples? If so, was it concerned with trade in agricultural or non-agricultural products?

7. Did the growth of commerce tend to change the character or direction of agricultural efforts?

8. Can you assign any reason why the patriarchal system should be found in conjunction with pastoral farming?

9. Did the pastoral farmer get a cash return from his industry? In what form did his return come?

10. Did he have "expenses of production" in the modern sense? What determined his acreage, labor force, and amount of accumulated property?

11. Did the classic nations conduct agriculture alone or as one of a group of related industries? What others had they developed?

12. Did the Roman farmer grasp the economic facts of his business? Illustrate, pointing out both where he did and where he did not.

13. Was the organization of agriculture in feudal times more or less along business lines than was that of Rome? than that of early pastoral peoples? What do you mean by the expression "organized along business lines"?

14. Who owned the land which was used for agricultural purposes under the feudal régime? Was control of land based upon absolute private ownership?

15. What is meant by the "engrossing" of land? by "primogeniture"?

16. Did the conditions of feudal tenure lead to a management of the soil which served the best interests of agriculture?

17. Was economic betterment the principal concern of the feudal lord? Was any surplus which might be produced above the immediate needs of himself and his dependents saved and devoted to improving the productive equipment of the estate?

18. Was labor employed effectively under the manorial system?

19. Contrast the personal rights of the feudal slave, the villein, and the metayer; their property rights.

20. Was any inducement to agricultural improvement offered to the rank and file of agricultural workers? any inducements to the accumulation of capital?

21. Was manorial economy concerned with market prices and cash transactions? Upon what did their prosperity or unprosperity depend?

22. What is meant by the "self-sufficiency" of the manor? Was it a self-contained *ef*ficiency?

23. What is meant by the "commutation of labor dues for money"? Did it play any part in the improvement of agricultural conditions toward the close of the mediaeval period?

24. Can you show any connection between "enclosure" and the improvement of English agriculture? Are enclosures still taking place in England?

25. Mention a few of the technical improvements which characterized the Agrarian Revolution.

26. What bearing did the growth of commerce during the sixteenth, seventeenth, and eighteenth centuries have upon changes which took place in agriculture?

27. In America did the colonists inaugurate a new type of farming, adopt or adapt that of the natives, or transplant European farming to this country?

28. What circumstances forced some modification of old practices? Have such conditions affected American agriculture since the colonial period? Do they still operate?

29. In reviving primitive methods were the pioneers economically justified? Can you suggest any primitive practice which is still persisted in though no longer justifiable upon economic grounds?

30. Were the reasons which caused American pioneer farms to be self-sufficient the same as those which brought about that condition upon the English manor? Show both likenesses and differences.

31. Trace several steps in the break-up of that self-sufficiency.

32. What is meant by "commercialized farming"?

33. Show how commercial agriculture leads to better utilization of natural resources. May it lead to poorer utilization? Did you ever see a cotton farm without a vegetable garden or a wheat farm without any fruit trees?

34. Show the difference between individual self-sufficiency and national self-sufficiency in agriculture. Is the latter desirable? Why?

35. Does commercial farming lead to one-crop agriculture? Inevitably?

36. Does the specialty farmer secure greater efficiency from labor? from equipment? Sometimes or always?

37. What is meant by "the business of farming"? What special knowledge or training does it call for?

PROBLEMS

1. "With the development of chemistry, bacteriology, and other physical and biological sciences, the economic aspects of the production side of agriculture were left to the farmer unaided. This resulted in a one-sided development of our agricultural education, which accounts for the fact that the wise farmer mistrusts many of the statements handed him by the colleges and experiment stations." Take several figures of loss due to insect pests or the escape of elements of plant food, such as are given out by entomologists and chemists, and illustrate the foregoing quotation. Show the relation of the economic to the technical problem in agriculture.

2. "The modern farmer, besides being something of a scientist, must be a good general, a more than good financier, a good executive, a man of courage and vision." Show how these qualities are related to, or grow out of, the economic problem of agriculture.

3. "The farmer used to be the most independent man on earth, and therefore the happiest. But now he is falling a prey to the railroad and the capitalist, and the trader and the labor organizer. His days of peace and prosperity are over." Is it true that the farmer must contend with these and other outside forces today? Is it true that they have wrecked his peace and prosperity? May he be benefited by them if he has the knowledge of how to work with them? Explain.

ADDITIONAL REFERENCES

Thomas, *A Source Book of Social Origins.*
Forrest, *The Development of Western Civilization.*
Bogart and Thompson, *Readings in the Economic History of the United States.*

Robinson, *An Economic History of Agriculture in Minnesota.*
Bidwell, *Rural New England at the Beginning of the Nineteenth Century.*
Cyclopedia of American Agriculture, Vol. IV.

TOPICS FOR SPECIAL PAPERS

The Survival of Status in Rural Relations.
The Commercializing of American Agriculture.
Agricultural Economist v. Agricultural Scientist.
The Place of Economics in Agricultural Education.

II. CONSUMPTION

QUESTIONS

1. Is there any logical reason for placing the discussion of consumption first in our study of the divisions of economics? What relation does it bear to the subject of production?

2. Some writers have put this division last. What reasons could be advanced for doing so?

3. Does the character of our consumption rest upon physiological, psychological, or social considerations? Are these mutually exclusive?

4. Is the aim of our consumption to secure maximum enjoyment, personal well-being, or social welfare?

5. To what may we look for guidance in these endeavors? Is the problem purely one of economics?

6. What is the law of diminishing utility? What qualifications must be emphasized in stating it? Does its general principle seem valid in your own case?

7. Show how the law of variety operates in your personal satisfaction of desires. Could you formulate a rule to cover the method by which one could secure the maximum return from each dollar spent for consumption goods?

8. Could such a rule be called rational consumption or an "*economic order* of consumption"? Do some persons govern their consumption after such a plan? Do many? Why?

9. Might such a plan be carried out by each individual without producing the most advantageous results for society as a whole? How?

10. Explain the "law of least social cost." Is it particularly significant in connection with agriculture? Why?

11. Does the fact that human wants expand beyond existing means of satisfying them have favorable consequences? Does it lead to progress? How? Necessarily?

12. What is meant by the "dynamics of wealth"? Can you show its relation to the standard of living?

13. Have Americans prided themselves upon having a high standard of living? In what sense has it been "high"? What results have followed?

14. Does the character of agriculture reflect the character of public consumption?

15. Does such response to consumers' demands sometimes bring unfortunate consequences? Do these ills fall upon the agricultural industry or upon society as a whole?

16. Are such results checked automatically? How? Promptly? Before harm is done?

17. Is the relation of the farmer to all this entirely passive or can he shape the conditions to his liking? Explain.

18. Does advertising alter the amount of food or other farm products consumed? Does it shift the consumption from certain articles to certain others?

19. Point out the danger of overestimating the possibility of persuading the public to consume according to the farmer's needs of a market.

20. What appears to be the farmer's positon with reference to his own consumption standards? How have they come to be as they are? Are they changing? For better or worse?

21. Can you point out defects in rural standards of consumption which appear to be due to lack of proper understanding of the problem, e.g., lack of knowledge of sanitary or dietary requirements? other causes?

22. How can each of them be remedied?

23. Point out some important merits of rural standards of consumption.

24. What is the meaning of an efficient standard of living?

25. Is the average American farmer's standard low? Inefficient?

26. Does immigration tend to modify rural standards of consumption? How?

27. Is a rise in the price of farm products reflected in the farmer's standard of living? How?

PROBLEMS

1. Look up Engel's Law (in Ely's *Outline of Economics* or elsewhere). Do you believe that the proportions which Engel found between the various classes of expenditures would hold for American rural families? How and why are they modified? Is this change for better or for worse? (See also selection 28 in this connection.)

2. "It's not much use to grow better corn and live stock and get more money if we can't use that money to make better homes. And how are we going to have better homes if we don't train the girls for it?" Is this the central need in rural consumption today? Are there other ways of bringing about desirable consumption standards? What is being done along any of these lines?

3. "A few make so much money that they can slight the art of spending without suffering discomfort, but the vast majority would gain as much from wiser spending as from increased earning. Common sense forbids us to waste dollars earned by irksome effort, and yet we have developed less skill in the art of spending than of making money. Ignorance of qualities, uncertainty of taste, lack of account-

ing, carelessness about prices—faults which would ruin a merchant—prevail in our housekeeping." Can you explain why it is that such a condition has come about? Does the rural situation in this regard show peculiarities of its own? How can the situation be remedied?

4. "Formerly the family was the unit in large measure for purposes both of producing and consuming goods. Production has been organized on the basis of a new unit—the business enterprise—and the new unit proved vastly more efficient than the old. But as a unit for consuming goods, for spending money, the family has remained substantially where it was in colonial days. We have not developed a large, more efficient unit for spending money." Is the rural family even more closely attached to the family system than the town family? How might efficiency in buying be brought to the rural family? Does domestic-science training operate in this direction? Does co-operative organization?

5. "The trouble with the farmers of this country is that they haven't got hold of the tremendous power of advertising. They complain of the railroads and the middleman, but what they need to do to move their product out at good prices is to get hold of the consumer through clever advertising. You can sell anything if you advertise it properly." Does such a statement apply without limitation? Was the writer probably thinking of wheat and cotton? Of what classes of goods? Point out the precise results which advertising does bring about.

ADDITIONAL REFERENCES

Mitchell, "The Backward Art of Spending Money," *American Economic Review*, II, 269.

Cherington, "The Ability of the Consumer to Defend Himself," in *Materials for the Study of Elementary Economics*, p. 374.

Langworthy, "Eggs and Their Value as Food," *Bulletin 471, U.S. Department of Agriculture.*

———, "Potatoes, Sweet Potatoes, and Other Starchy Roots as Food," *Bulletin 468, U.S. Department of Agriculture.*

Holmes and Lang, "Fats and Their Economical Use in the Home," *Bulletin 469, U.S. Department of Agriculture.*

Atwater, "Food Values and Uses of Poultry," *Bulletin 467, U.S. Department of Agriculture.*

TOPICS FOR SPECIAL PAPERS

Independent Standards of Consumption for the Rural Community.
Learning How to Spend Wisely.
Educating the Consumer of Farm Products.
A Criticism of Domestic Expenditures in ———.
An Efficient Standard of Living for the Farmer.

III. LAND AND OTHER NATURAL AGENTS OF AGRICULTURAL PRODUCTION

QUESTIONS

1. Might we state the process of agricultural production in the form of an equation, as follows:

$$L+W+C=P,$$

in which L stands for land and other agents of nature, W for work or labor, C for the capital-goods employed, and P for the product secured?

2. To give such an equation any degree of mathematical accuracy, each term should have an exponent, should it not, in order to show how much of each factor is taken, as 6 units of work equipped with 3 units of capital goods and employed with 10 units of land produce 15 units of product?

$$10L+6W+3C=15P.$$

3. But, if the exponent gives expression to the quantitative value of the given factor, do we not still require a coefficient to give expression to its qualitative value? Is the factor L "raised to a higher power" by certain favoring conditions of climate, fertility, and topography which should be expressed as coefficients of the factor when we are making up our equation of production? (For a fourth factor of production, see chapter vi.)

4. Show how extreme heat and extreme cold place limitations upon the productive power of land and how men have so adapted their agricultural operations to these conditions as to push their economic efforts up as close as possible to the line of absolute physical unproductiveness.

5. Is a region which is too cold or too hot for raising a particular product yet capable of yielding a product of some other kind? Is this substitute product likely to have as great economic value as those of less extreme climates? greater value? Illustrate.

6. May a region which does not yield certain products with conventional methods of growing be made productive by a modification of that method? Illustrate.

7. Can man alter the climate of a region to permit the growing of a crop not naturally suited to the temperature conditions? Are all the lands now producing citrus fruits, peaches, and other delicate products naturally safe for such vegetation?

8. What is meant by a "marginal" climate? What factors enter into the establishment of the margin of cultivation? Is its location to be regarded as permanent? Why?

9. Does rainfall impose a more or a less rigid limitation than does temperature upon the productivity of land? Explain.

10. Show how moisture is a limiting factor even in so-called humid regions. Is there also a surplus of moisture in the same regions? At the same time?

11. Give a brief discussion of the methods of dry farming. Are similar methods applicable during droughts in sections ordinarily sufficiently watered? Which would bring the larger returns, taking more dry land into cultivation or handling the old lands better during dry periods? Which is more difficult to achieve?

12. Show the nature of the economic problem resulting from the presence of irrigable lands, sub-humid lands, lands subject to drought, lands occasionally overflowed or waterlogged, small and scattered bits of swamp, and large tracts permanently too wet for cultivation. Where can we best push out the margin of production?

13. Explain how judicious and scientific selection and breeding of plants may enable us to use more lands in their natural state. Is this cheaper than trying to change the character of the land? How about the value of the product?

14. What proportion of the area of the United States is now cultivated? Is any part of our area unavailable because of temperature conditions? How much may be added by reclamation of lands too wet or too dry at the present time? Why have we not already done this? When shall we do it?

15. What are the chemical elements which are the limiting factors in most agricultural soils? Is it economically practicable to maintain this source of productivity through an indefinite period of agricultural use of land? Explain.

16. Which physical factors in productivity are inherent in a soil and which are the result of tillage methods? Show the economic aspect of these facts. May intelligent farming secure a virtual increase in our land resources at no expense?

17. Does the present trend of our biological studies seem to hold out a hope that in the future we may maintain the productivity of our lands more completely and more economically than in the past? How?

18. Is agricultural productivity an "original and indestructible power of the soil"? In your answer relate the physical law of the conservation of matter, the question of biological condition and the needs of plants, and the economic issue involved.

19. Point out both the technical and the economic sense in which rough topography constitutes a brake upon the productivity of land.

20. How may we get the maximum performance from hilly lands? Do the same general methods apply here as in previous sections, viz., choosing a suitable crop, adapting our agricultural methods to the character of the land, and actually remaking the land? What is likely to be the economic order of their application? Illustrate by the experience of America, Italy, and China.

21. Why did population spread westward, as soon as means of transportation were made available, instead of using the eastern seaboard more fully? Why not raise all the perishable products for New York City in the adjoining counties? Why have American farmers gone to Western Canada?

22. State the law of diminishing returns from land. Is it a part of the working knowledge of the successful farmer? How does he phrase it? Do some farmers ignore the principle? Entirely? In part?

23. Under what circumstances will later applications of labor and capital to land yield a larger return than those which have gone before?

24. Does this fact constitute a denial of the principle of diminishing returns? State the law in such a form as to cover such cases fully.

25. What is intensive cultivation? the intensive margin of cultivation? Give local illustrations.

26. What is extensive cultivation? the extensive margin of cultivation? Illustrate.

27. Are these relative or absolute terms? When is cultivation absolutely extensive?

28. Must all agriculture be somewhat extensive? somewhat intensive? Is the really significant question whether a particular outlay be made intensively or extensively?

29. Popular writers and speakers are constantly referring to diminishing returns in agriculture as though it were the same thing as the decline in the fertility of land. Show carefully that this is not the case. Again state the law so as to exclude the possibility of such a blunder in interpreting it.

30. Now show the effect which declining fertility will have upon the operation of the law of diminishing returns from land.

31. Is scientific agriculture a means of getting a reprieve from the effects of the law of diminishing returns from land? Explain just what is the relationship of the two. Show that your answer to this question is consistent with that of the previous case.

32. Does conservation mean saving from use? What does it mean?

33. Outline a policy of conservation of farming land which is economically sound today. Does it take account of the principle of diminishing returns from land farmed intensively?

34. Whose interests should be kept in mind in making a conservation program, those of present consumers of agricultural products or those of the future? Present or future producers? Can we reconcile the interests of all these classes?

35. Were the pioneers who homesteaded the Mississippi Valley conservationists? Were they enemies of the people? Was their profit others' loss? Whose? Have they any defense?

36. Can you point out some sort of exploitative agriculture which is economically justifiable? some which is not?

37. Is the careful farming of rocky hillsides (even conceivably increasing their fertility) true conservation? What would be? Extend this to apply to all the varieties of land in the United States.

38. Is there reason to suppose that, having taken the cheap road to agricultural production in the past, we shall find new sources of cheap fertility in the future? Explain several prospects.

39. Does it seem likely that numerous changes in the arts will in the future tend to enlarge the agricultural powers of land? Mention several.

PROBLEMS

1. A lecturer said: "Few people realize that Australia contains an area larger than the United States. If you do not find suitable opportunities here, come out to Australia." Even granting the accuracy of his figures, is physical area of the two countries a fair basis of comparison of their agricultural resources in land? Are the United States and Canada comparable in this way? Why? The United States and Mexico? Europe?

2. "A fact which distinguishes agriculture from all other industries is its dependence upon land. A manufacturing or mercantile establishment can economize land surface by building up into the air; a mine needs land surface only as a means of getting access to the mineral deposit beneath. But, no matter how deep the soil or how rich the deposit of plant food in a given area may be, there is a limit to the number of plants that can grow on that area, and therefore the product of that area does not depend exclusively upon the depth and richness of the deposit; it depends quite as much upon the size of the area." Is this a peculiarity of land as a factor in agricultural production? Does the thinness of a soil layer sometimes become a limiting factor? Did you ever hear of "two-story farming"? How deep does a deep-tillage machine make the soil available? May we go deeper in the future? Only very little manufacturing and mercantile business runs more than ten stories high. Is it likely that deep tillage, artificial fertilization, and the like will give us ten-story agriculture? How high will cities be then?

3. "The experience of Holland in draining Haarlem Lake may serve as an example. This was a body of water covering 42,000 acres at an average depth of over 13 feet. Such an undertaking was relatively greater in 1848 than it would be now and was all the more difficult because the bottom of the lake was below sea-level, and all the water had to be lifted out of it." Just before the outbreak of the European war Holland was planning an enormous undertaking of this sort. Does this point to large possibilities at the mouth of the Mississippi? elsewhere? Is it conceivable that much of the water which now comes down our rivers might be impounded at flood time and pumped back over the land during periods of scant rainfall? How would the coming of cheaper mechanical power affect this?

4. "It is well known that pioneer homesteads were generally located by springs; that in the course of a decade or two many of the springs failed, and shallow wells were dug for domestic supply; and that these wells in turn frequently failed and were either deepened or replaced by drilled wells. A careful investigation of conditions for about twenty years back shows a very general lowering of the water table throughout the older settled portions of the Mississippi Valley—3.87 feet in Wisconsin, 3.45 in Minnesota, 1.94 in Tennessee, and so on. For eight states this seems to indicate an average lowering equivalent to 10.5 feet in the eighty years since permanent settlement and cultivation began. The water supply of a country is its agricultural capital, and these figures make clear the fact that the reserve agricultural capital of the country is shrinking." Is this the real limiting factor in our agriculture? If so, what are we going to do about it?

5. "There are in this country a number of important sources of potash salts, and, owing to the conditions brought on by the European war, they are in a way to be developed on a scale which offers hope that the American farmer may have a home supply of potash in the not distant future." Explain. Should we include deposits of phosphate, potash, and other mineral fertilizers as a part of the natural resources of agriculture? Would the discovery of a potash bed enlarge our land resources as truly as the discovery of an unknown island?

6. "The farmer wants extent of land and he wants his land to be fertile, but what is sometimes even more significant than these qualities is the *location* of the farm which he is to cultivate." Aside from its relation to climate, is location a factor in the productivity of land? value productivity or technical productivity? May these economic qualities of land which are due to location be changed with the passage of time? Illustrate.

7. "The profitable limit to intensive cultivation is reached at the point where the return to the last unit of labor and the last unit of

capital corresponds to the return to labor and capital on land at the extensive margin of cultivation." Is this true? Work out your proof illustrating with a chart.

ADDITIONAL REFERENCES

King, *Farmers of Forty Centuries.*
Carver, *Principles of Rural Economics*, chap. iii.
Shaler, *Man and the Earth.*
Kropotkin, *Fields, Factories, and Workshops.*
Teele, *Irrigation in the United States.*
Crookes, *The Wheat Problem.*
Hopkins, *Soil Fertility and Permanent Agriculture.*
Hill, *Highways of Progress.*
McGee, "Subsoil Water of Central United States," *Yearbook U.S. Department of Agriculture*, 1911.
Brown, "Importance of Developing Our Natural Resources of Potash," *Yearbook of the U.S. Department of Agriculture*, 1916.
Woods, "The Present Status of the Nitrogen Problem," *Yearbook of the U.S. Department of Agriculture*, 1906.
Hirshberg, "Making Foods of Chemicals," *World's Work*, XXVI, 115. (See also *Scientific American Supplement*, LXXIII, 310.)
Woodward, "Land Drainage by Means of Pumps," *Bulletin 304, U.S. Department of Agriculture.*

TOPICS FOR SPECIAL PAPERS

How Science Discovers New Agricultural Resources.
Fitting the Character of Our Production to the Nature of Our Resources.
The Possibilities of Irrigation (or drainage) in the United States (or some particular state or section).
Getting the Full Value of Our Rainfall.
How Fertility Is Wasted.
The Danger of Declining Fertility.
Why We Need Not Fear Future Barrenness of Our Fields.
A Rational Conservation Program for Agricultural Lands.

IV. HUMAN EFFORT AS A FACTOR IN AGRICULTURAL PRODUCTION

QUESTIONS

1. In our equation of agricultural production, shall our labor factor carry an exponent to indicate numbers of workers and a coefficient to indicate their quality?

2. What percentage of our people make up the agricultural group? What has been the trend of this proportion since 1820? Make a chart to show this.

3. Why has the rural birth-rate fallen off? Does this constitute a national danger? Why?

4. What is the nature and meaning of the "rural exodus"? Is it greater or less today than one year ago? Why? Five years ago? Why? Twenty-five years ago?

5. In the so-called rural exodus do certain classes leave the farm? Which classes? What is the ultimate effect upon the labor force?

6. Has the back-to-the-land agitation actually reversed the tide? Why? Did it introduce any new element into our agricultural labor group? Explain. Is this important?

7. How large a factor is immigration in the determination of our farm labor supply? Was it larger or smaller in the past? Why? Was it different in character?

8. Were South Europeans agriculturists in their own countries before coming here? Do they prove good workers when they get into our farming communities?

9. What are the principal difficulties in the way of recruiting our farm workers extensively from this source?

10. What part has the Asiatic played in the development of American agriculture?

11. What is the present status of the question of Asiatic labor on American farms? How has it come to this pass?

12. How large a place does the negro fill in the ranks of farm labor? Does he seem to hold his own in his original field? Does he show any tendency to invade other areas? to be displaced by other workers when brought into direct competition? Why?

13. Is women's part in agricultural labor increasing or diminishing? Do you see any possibility of a change with the general movement of women into industry? As farm managers? in what types of farming? As employees? (See problem 4.)

14. What sort of a labor demand is made by agriculture? Is there a demand for specialized ability and training?

15. How long does it take to make a master-farmer? Explain the process fully. Is it a trade, a profession, or a job?

16. How should this labor group be taught or trained in order to get the most adequate labor supply at the minimum cost?

17. What is the relation of versatility of the laborer (i.e., familiarity with many kinds of farming) to progress in farming methods? Is this an argument against specialized agriculture?

18. Explain the co-operative demonstration work as a method of securing a high quality of farm effort.

19. Is the negro a labor element which is readily assimilated into new methods of farming? Is he what might be called a "natural" farmer? What does that mean? Does he use machinery effectively? get the scientific point of view? work hard? steadily?

20. Show how health conditions affect the quality of the rural laborers? How does the negro stand in this regard? Are conditions of rural health improving? How?

21. Does the farm worker's state of mind have anything to do with his efficiency? Would a feeling of security be a help? self-respect? knowledge that increased efficiency would bring increased pay? Point out some others.

22. Would five members of a given family running their farm enterprise constitute a more or less efficient labor group than five unrelated persons of equal strength and ability? Why?

23. Can gangs of laborers be employed effectively in agriculture? Why? More effectively in some types of agriculture than in others? Why? Can gang work be made the basis of permanent labor organization in agriculture or used only for seasonal work? Explain the economic importance of this factor.

24. Does tenancy produce inefficient labor? How? Might it be that the man was a tenant because he was inefficient instead of the other order of cause and effect?

25. Are all farm owners efficient? Are they likely to be stimulated by the responsibilities of ownership? May the tenant be responsible for a larger business than the owner?

26. Would it be possible to introduce forms of labor association which would bring about more effective labor conditions? Can agricultural interests follow the pattern set by other industries?

27. During the war some European countries have provided that farm labor must be pooled during harvest time, so that as soon as a farmer has his own crop harvested he may be assigned to help others whose work has not yet been finished. In America some so-called civil-military plans of mobilizing high-school boys and city men to work on farms during their respective rush seasons have been advocated. Which of these plans appears to you to be the more feasible?

Does the type of farming affect the availability of either of these methods of organizing labor? Do they offer valuable suggestions for peace times?

28. Does hired labor or "unpaid labor" (i.e., members of the farmer's family) make up the larger part of the labor force which the average American farmer employs? Does this vary in different sections and with different types of farming? What effect does this have on the quantity and quality of the labor which the farmer uses in various operations?

PROBLEMS

1. "In the period following the war progress in agriculture and appliances was at a standstill owing to the capacity of the labor. The watchword was 'cut down, wear out, and move on to more productive fields,' only to keep in perpetual motion the same destructive theory." Is it true that the capacity of the laborer acts as a limiting factor and determines the type of agriculture which may be followed? Give some illustrations from the present, if possible from your own community.

2. "The labor thus employed [share system of the South] only works about seven months in the year. The rest of the time is devoted to loafing, fishing, hunting, and having a general good time. A school term of five months is provided and paid for by the State. This covers all the time that can be taken from the farms during each year." Do you see any cause-and-result connection here? Is such a labor situation hopeless? Where should you begin if trying to effect an improvement? What would be the condition of agriculture as long as this condition continued?

3. "The Hollanders along the western shore of Lake Michigan take possession of the low lands that others do not regard as valuable and are making the best kind of farms." Has immigration brought us types of labor ability which we should not have had otherwise?

4. "In the more intelligent scheme of the new country life, the economic position of woman is likely to be one of high importance. In the development of higher (more intensive) farming she is better fitted than the more muscular but less patient animal, man, to carry on with care that work of milk records, egg records, etc., which underlies the selection on scientific lines of the more productive strains of cattle and poultry." Does this seem to indicate a new but important possibility? Is it analogous to the field which women have come to occupy in industrial life? Is there any reason why the two cases are not parallel?

5. "A large supply of very cheap labor is sometimes a means of getting a large product per acre, and this is just what certain mis-

guided persons, ignorant of the first principles of economics, are constantly clamoring for. But a large supply of cheap labor means a large number of families supported on very low wages; and that means in turn widespread poverty, which is precisely what the study of political economy aims to prevent." Show what this means in the present stage of agricultural development in the United States, and point out what kind of labor policy is necessary to insure a large product *per man*.

6. "The one way to solve the labor problem is to organize the farm business so well that the labor used on the farm is unusually effective. In other words, to so manage the farm work that a given amount of labor accomplishes more than on the average farm." Do you agree? How is this process to be carried into effect? Can we draw any lessons from the management of labor in industry? What differences are there in the two situations?

7. "One of the greatest sources of low productivity from farm labor is to be found in the amount of time lost through unfavorable weather conditions. Until this leak is stopped our farms remain in a low state of efficiency as compared with other industries." Is this true according to your observation? Do you know of any farm proprietor who has solved the problem? What suggestions can you make?

8. "The whole scheme of labor efficiency in industry is based on division of labor. But no such division is possible in agriculture." What are the gains from division of labor? Is it entirely absent in farming? Do certain new types of farming take greater advantage of this principle than the old?

ADDITIONAL REFERENCES

Warren, *Farm Management*, chaps. i and xi.
Taussig, *Principles of Economics*, chaps. ii and iii.
Emerson, *Twelve Principles of Efficiency*.
Labor, "Factory Management Series," A. W. Shaw Company.
Hourwich, *Immigration and Labor*, Part II, chap. v.
Hasbach, *A History of the English Agricultural Labourer*.
Industrial Commission (1900), *Report*, Vol. X.

TOPICS FOR SPECIAL PAPERS

Why the Proportion of Farm Workers Is Decreasing.
What the Immigrant Has Contributed to American Agriculture.
The Meaning of Efficient Farm Labor and the Means of Securing It.
Machinery as a Substitute for Farm Labor.
The Negro an Indispensable Factor in American Agriculture.
The Possibilities of Specialized Labor in Agriculture.
The New Labor Demands of American Farming.

V. CAPITAL-GOODS AS A FACTOR IN AGRICULTURAL PRODUCTION

QUESTIONS

1. How productive would a farmer be today if he attempted agriculture empty-handed, without equipment?

2. How effective was the labor of the primitive man as compared with the modern farmer? Did he have any forms of capital-goods to aid him? How did he get them? Why?

3. Give a definition of capital and show why we use both the expressions capital and capital-goods.

4. What do the Commissioner of Labor figures indicate as to the increase of technical productivity which has resulted from the use of farm machinery? Do you think this is likely to increase in the future as rapidly as in the past?

5. What other forms of capital-goods besides the ordinary farm implements are being added to our farming equipment today? Are irrigation works capital-goods?

6. Is it possible that as the rate of progress in one direction tends to slow down we may find a more rapid addition to our productive equipment in some other direction? In what fields of capital development other than farm machinery are we making rapid advance today?

7. Show the relation which the amount of farm capital bears to the farmer's return from labor. What relation does the capacity of the farmer bear to this problem?

8. Does the increase in the capital factor demand a proportionate increase in the capacity and training of the farmer? mechanical training? what other kinds?

9. Is it in this connection particularly that economic training is significant? Explain.

10. If one needs to be a good mechanic in order to get the best performance from a tractor and to prevent undue deterioration of the machine, does one need to be a good economist in order that capital may be employed most effectively and that capital value may not be dissipated even while physical property remains intact? Explain.

11. How much capital does the average American farmer undertake to employ today? In what forms is it? What seems to be the outlook for the future?

12. Does the economic efficiency of a piece of farm equipment depend only on its technical performance or does it depend also on how it is fitted into the farm enterprise? Explain and illustrate.

13. Must the size of the man, the size of the machine, and the size of the farm be adjusted to each other? What difficulties does this present? How can they be met?

14. Should the different forms of capital-goods be adjusted with reference to each other? What is the result if they are not?

15. What factor is often neglected in this apportionment of the farm capital? Why is this so? What results follow?

16. Does the productivity of the various capital-goods vary exactly in accordance with their market price? Are these discrepancies sometimes large? Illustrate. Does this cause a particular importance to attach to the selection of the particular article to be purchased?

17. Are farmers as a rule shrewd buyers? stingy buyers? lavish buyers? gullible buyers? intelligent buyers? Try to assign the reasons in each answer that you give.

18. Is the buying function of the farmer becoming constantly more important? Why? More difficult? Why?

19. How can the farmer protect himself or be protected in this regard? See what activities your state undertakes along this line.

20. What is meant by depreciation? Can this be reduced in the case of most American farms? How?

21. Can depreciation be entirely eliminated? Should the farmer take account of the actual rate of depreciation of capital-goods in figuring his profits and planning his future enterprises? Show why.

22. Do we expect capital in the long run to maintain itself? How? To increase in amount? How?

23. Is the process of replacement or further accumulation an automatic one? What part must the farmer take?

24. In general, do we expect farmers to supply the capital for the agricultural industry or do we expect them to use others' capital? What is necessary if they are to secure a supply of capital from outside sources? Must the one who supplies such capital know that his money is safely employed? that it is profitably employed? What does this require of the farmer?

25. Explain the relation of insurance to the question of capital conservation. Is insurance or prevention better? Does the system of insurance tend actually to reduce the amount of losses? How?

PROBLEMS

1. "There is an important difference between land and capital-goods in that when more capital-goods are wanted it is usually the more productive forms which are made, while an increase in the amount of land under cultivation usually requires that less productive

land be resorted to." Can you illustrate this proposition from actual experience? If it is true, would it seem to show that the condition of the farmer and indeed of the whole human family may be made economically better as time goes on? What one condition would have to be observed if we are to benefit from the increasing efficiency of capital-goods?

2. "The trouble with most farmers is that they have bought their equipment in response to the solicitation of some fellow who had a machine he wanted to sell, instead of buying only those things for which they knew there was a real need, in fact the most important need for their particular farm operations. Many a farmer finds himself limited because he can't make a certain expenditure for a breeding animal, some fertilizer, or a piece of machinery and has only himself to thank for it, because he spent his money for some fool thing that he didn't need and that won't work anyhow." Is such a condition more true in some sections than in others? of some classes than of others? How can the farmer's capital be conserved and more profitably directed?

3. "The use of the tractor is not wholly a question of cheaper or more convenient operation, but also of having enough power to do certain farm tasks. Only with a tractor can plows and discs be put down to proper depth for summer and fall plowing. . . . . It requires a better workman to keep a tractor running efficiently than it does to operate a team." Pick out several other cases which illustrate the fact that the character of capital-goods determines the possibilities of farm operation and the nature of the labor demand. Can you cite any product we could not raise at all if it were not for mechanical aids to production?

4. "Agriculture can be conducted with much or little capital as conditions dictate. While a man with little capital will always work at a disadvantage, it is possible for him to begin with greater chances of success than in many other lines of effort." Is this true? Explain and criticize.

ADDITIONAL REFERENCES

Taussig, *Principles of Economics*, chap. v.

Quaintance, *The Influence of Farm Machinery on Production and Labor*, "Publications of the American Economic Association," 3d Series, Vol. V.

McDowell, "Influence of Age on the Value of Dairy Cows and Farm Work Horses," *Bulletin* 413, *U.S. Department of Agriculture.*

Valgren, "Farmers' Mutual Fire Insurance," *Yearbook of the U.S. Department of Agriculture*, 1916.

Cyclopedia of American Agriculture, Vol. I, chaps. v and vi.

TOPICS FOR SPECIAL PAPERS

The Advent of Capitalism in Agriculture.
Agricultural Capital as the Basis of Social Progress.
The Delicate Task of Conserving Farm Capital.
Pirates Who Prey on the Farmers' Capital Fund.
Economic Bases for Comparing Horses and Tractors.

VI. ORGANIZATION AND MANAGEMENT OF THE AGRICULTURAL ENTERPRISE

QUESTIONS

1. Is there a function of organization or business enterprise which constitutes a fourth factor of production similar to land, labor, and capital?

2. What are the attributes by which we may distinguish it? Is it separate from labor?

3. The other factors are quantitative, are they not? also qualitative? Is organization or entrepreneurship qualitative? quantitative? Explain.

4. May we now put in a fourth factor in our equation of production—E? Shall we give it an exponent? a coefficient?

5. Does it perhaps indicate rather the power to which the three quantitative factors are raised? How would this be:

$$(10L^{fl}+6W^{e}+3C^{t})^{e}=15P?$$

This indicates roughly that the coefficients of land are fertility and location; of labor, the efficiency of the worker; and of capital, the technical quality of the capital-good. Modifying the whole equation is the efficiency of the organization in which they are joined, expressed here by the coefficient e outside the trinomial.

6. Show that the law of diminishing returns applies equally to each of the factors of production. Does the expression "law of combining proportions" seem to you to express this idea more clearly than the older expression "diminishing returns"?

7. Does this same question of most profitable proportion come up in connection with the relationship of various farm enterprises one to another? For instance, how many chickens will give the greatest profit on a farm which has a certain acreage in grain, a certain number of livestock, and a certain number of women and children in the family?

8. Show that this is the real problem of one-crop v. diversified agriculture.

9. Show that the same issue is involved in the most profitable adjustment of agriculture to our industrial development, commercial facilities, and the whole complex of economic activities.

10. Show that a wise choice of enterprises is the beginning of wisdom for the farmer.

11. Does the choice of location come next in importance? Are these two questions separate or more or less bound up together? Explain and illustrate.

12. Will the amount and kind of land that the farm manager chooses be determined solely by the kind of farming he likes best? Does society have any way of telling him what it most needs him to do? How? Does he always heed? Can you trace any sequence of results if he does or does not follow this line?

13. Are both the individual and society constrained to fit their preferences to the sort of natural resources available? Illustrate.

14. Is the course of business enterprise also deflected by the number and character of laborers available? How does such a process work itself out?

15. Is the organization of the agricultural industry also modified by such limiting factors as the scarcity of the capital fund or the efficiency of capital-goods?

16. Show that this whole process is to be explained in terms of the mutual adjustment and readjustment of the prices of products and of the component cost-goods which enter into their production.

17. Let us then go back to the fundamental proposition of chapter i, viz., that the modern business farmer must take his place in a commercial system organized upon a basis of price. In making his decisions as organizer and manager as to what to produce and what to use in producing it, is it his task to bring about wholesome relationships among these various price-goods?

18. Is his own personal profit involved? How? Is the welfare of others? Explain.

19. Can you illustrate these general propositions with reference to the redirection of farm enterprise in the United States in connection with the European war?

20. We are now in a position to view the problem of the proper degree of intensity of cultivation more adequately. Is extensive agriculture characteristic of periods of cheap land? Why? Does the speculative fever often lead men under such circumstances to buy more land than they can work to the greatest advantage? Why can they not work it to advantage?

21. Under such circumstances what policy should be followed in order to secure the greatest profit? Note here that there may be two quite distinct questions involved, one as to the maximum physical product and the other the price received from a crop of given size.

22. Show clearly the difference between the size of farm and the size of farm business. Is the size of farms in the United States increasing or decreasing? Why? What of the future?

23. Is the size of the farm business increasing or decreasing? Why? What circumstances enable a farmer to conduct a bigger business on a given acreage? Does a bigger business mean a more profitable business?

24. What acreage appears to be most profitable at the present time? What is the limiting factor? Is this limit likely to be pushed outward?

25. The scientific-management movement in industry today lays much stress upon plant design and shop management. Do these questions have equal importance to the farm manager?

26. What are the principal considerations to be taken into account in the lay-out of the farm? Give reasons.

27. Point out the importance and possibilities of a working plan for man labor; for horse labor. Can efficiency be carried as far in this direction by the farmer as by the manufacturer? Why? Be very careful in answering this question. Don't imagine that all factories are 100 per cent efficient, nor be modest about the possibilities of really scientific farming.

28. Show the importance of the problem of how to buy raw material, e.g., feedstuffs or fertilizer. If we say that a dairyman is buying the wrong feed in spite of the fact that his cattle are thriving, what do we mean? Has he harmed anyone by so doing? Is this a concrete case under the general issue discussed in questions 16–18, above? Explain.

29. What are the advantages of the family system as a form of farm organization? Has it also some weaknesses and defects? What are they?

30. What changes have come about in the organization of other industries which have already passed out of the family system? Have these marked gains in economic efficiency? Have social problems been created thereby? Do they appear to be in process of being solved or to be growing worse?

31. Would it be possible to carry these industrial types of organization over into agriculture? Why should we desire to do so? Why hesitate?

32. Point out the principal advantages of having a larger unit of operation in agriculture. Might this end be secured by other means than the resort to industrial forms of organization? Explain.

33. Even if we have operating units of the most efficient size, may it be desirable to have a larger unit of commercial organization or financial control? Is this the situation in the great industrial corporations? Are there any attendant disadvantages or dangers? May they be eliminated?

34. May these advantages be secured by farmers through cooperative organization? Does such organization avoid the dangers of large-scale corporations?

35. Analyze the theory of co-operative organization carefully, in such a way as to show specifically *how* it is capable of securing more efficient use of (*a*) natural resources, (*b*) labor powers, (*c*) capital. How about skill of business enterprise under co-operation? How is control exercised? Is it sufficiently centralized?

PROBLEMS

1. "On the average American farm there are areas of waste land. Some of these can never be profitably reclaimed, but others found on about all farms may be termed wasted areas. They are so misused that they produce nothing." Does such a situation present a problem to the farm organizer, e.g., to find an enterprise suited to those neglected and perhaps ill-favored areas, to marshal the labor and capital necessary to reclaim them, etc.? Explain fully in terms of the business organizer's function. Might the same general proposition be applied to wasted labor and wasted capital-goods?

2. "It was found that specialized farms, those of tobacco, stock, or dairy type moderately diversified, are the most efficient in this region and that the general mixed farms, more highly diversified, are the least efficient." Does such a situation seem to you peculiar to the region referred to (the bluegrass section of Kentucky) or is this form of organization likely to bring maximum profits under all circumstances? (See questions 6–8.)

3. "Certain enterprises may be distinctly profitable when occupying a minor position in the farm business and distinctly unprofitable if made major enterprises." Examine the farming of some particular locality to ascertain whether this proposition is true and whether existing practices are well- or ill-advised if measured by this test.

4. "The head of a large factory can devise means for supervising his men and for securing the execution of his orders. But the owner of a farm can use hired labor to advantage only when his own example and his own oversight supply the needed stimulus. The tasks of twenty men engaged in farming would be spread over several hundred acres and must present troublesome questions in assigning and supervising the work." Does this mean that farms must be limited to a few hundred acres employing not more than five persons the year around?

Farmer X has his office at the top of his house, which is located on a hill overlooking his farm. He has equipped it with a telescope with which he watches his field hands, and he also has a Ford with which to get quickly to any part of the farm. Do these devices enable him to supervise his men adequately? For how large a labor force and for how large an area do you think such methods would be

effective? Might it be extended still farther by the use of field telephones? Can you think of still other means of overcoming the factor of distance in supervising the operations of a farm?

5. "Profits can be increased most easily by attention to the weakest points in a system of farming. The more vital the weakness, the greater the increase in profits that can easily be made. It is both easier and more profitable to increase low acre yields than high ones and a small product per cow than a large one." Explain, relating your answer to the principle of diminishing returns. Is this a universally valid statement? Would it apply to the agriculture of the whole country as well as to the practice of a single farm? By "low yield" does the writer mean low absolutely or relatively to the capacity of given instruments of production? How is capacity to be determined?

6. "The Vegetable Growers' Co-operative Association of ——— have recently employed an expert to superintend their operations and make researches into the celery and tomato diseases which have been interfering with their success during the last few years." Explain this in terms of efficient organization of agriculture.

ADDITIONAL REFERENCES

Card, *Farm Management.*
Pratt, *The Organization of Agriculture.*
Powell, *Co-operation in Agriculture*, chaps. i, ii, v, vi.
Wolff, *Co-operation in Agriculture*, chap. xiii.
Fay, *Co-operation at Home and Abroad.*
Aldridge, *Farming Corporations.*
Levy, *Large and Small Holdings.*
Carpenter, *Profit Making in Shop and Factory Management.*
Bilings, *Seasonal Distribution of Farm Labor, Chester County, Penn. Bulletin 528, U.S. Department of Agriculture.*
Humphrey, "Labor Requirements of Dairy Farms as Influenced by Milking Machines," *Bulletin 423, U.S. Department of Agriculture.*
Mowry, "The Normal Day's Work of Farm Implements, Workman and Crews in Western New York," *Bulletin 412, U.S. Department of Agriculture.*

TOPICS FOR SPECIAL PAPERS

The Place of the Promoter in Agriculture.
Choice of Crops as a Factor in Farm Organization.
The County Agent as a Factor in Agricultural Organization.
Business Enterprise in Farming.
Scientific Management on the Farm.
An Analysis of Co-operation as a Type of Agricultural Organization.

VII. RECORDS AND ACCOUNTS AS MEASURES OF EFFICIENT MANAGEMENT

QUESTIONS

1. What is the purpose of a system of accounts? Are financial items the only ones which should be recorded? Explain.

2. What is the nature and purpose of "production records" on a farm?

3. Should the farmer take a financial measurement of his business at stated intervals? What is its purpose?

4. Why is a system of running accounts without periodic inventory as likely to deceive the farmer as to enlighten him?

5. What difficulties are met with in making a satisfactory inventory? Is it true that the accountant starts out with certain figures of his own making and that, no matter how accurate his method, the results cannot be any more correct than the figures with which he starts, or which he introduces at later stages?

6. Is it possible to secure units of valuation based upon a large number of cases treated statistically?

7. What is depreciation? appreciation? What benefit should the farmer derive from keeping a careful record of these items?

8. Should profits or losses due to changing values of the farm property be kept separate from profits or losses from operation? Do you know of farmers who deceive themselves by not separating these accounts?

9. The financial statement of the ordinary commercial enterprise shows "resources and liabilities." What is meant by these terms? by "net worth"?

10. What would appear on the liability side of the farmer's financial statement? If he has no outstanding obligations, would a summary statement of his inventory constitute his financial statement and show his net worth?

11. How should records of current receipts and expenses be kept? What is a ledger? May the farm accounts be kept in this book alone?

12. What is a journal? a cash book?

13. Since the farmer wishes to use as few books as possible and since his transactions are usually neither numerous nor complicated, what book or books should he use? Why?

14. If one is to get the greatest benefit from the keeping of accounts, what comparisons does he need to make besides the comparison of his own financial situation from year to year?

15. Is it important also that he discover the source of his profits or losses? Do production records show the source of gain or loss? its amount? Do general accounts show amount of gain or loss? its source?

16. What is "cost accounting"? What records other than those we have been considering will be needed in a system of cost accounts?

17. What are overhead charges and what difficulties do they present in cost accounts? How may these be met?

18. What principle should be followed in the charging for labor or materials which are used in a particular enterprise but which would not otherwise command any price?

19. Show how cost-accounting methods reveal the competitive or non-competitive character of farm enterprises. How does this affect the farmer's practice?

20. Is the value of cost accounting on the farm to be found in the absolute figures obtained or in the comparative results (e.g., year with year under changed methods, one crop with another, etc.)?

21. Does the manufacturer use "cost of production" figures in such a way as to influence the making of prices? Does the farmer do so?

PROBLEMS

1. "It is probable that no other business followed for sole support could long survive the lack of an accounting system; yet in spite of this lack the farming business continues to prosper." Can you explain why the situation with reference to farm accounts differs somewhat from other industries? Is that difference becoming less today? Why?

2. "More farmers fail of financial success from a lack of business methods and proper records than from ignorance in handling land, plants, and animals, and in making them thrive." Do you agree? Can you show certain particulars in which business methods are likely to be improved as a direct result of the existence of a system of accounts? Might some business blunders occur even on a farm which had an admirable set of books? Is it conceivable that, if a very elaborate set of books is undertaken, time may be spent upon them which would be better employed in some active farm work?

3. "Many farmers have found a diary a helpful means of keeping a fairly complete record of their farm buisness. With a little care and thought the value of a diary for this purpose can be greatly increased. With some extra pages in the back for the farm inventory and summary, this book can easily be used to keep financial records of the farm business." Is such a system a happy mean between the slipshod methods of the farm without any financial record and the one which

employs labor on the books under conditions of diminishing returns as compared with other farm employments? For what sort of farm accounting is the diary method adequate? What are its limitations?

4. "Most of the bulletins on farm bookkeeping and farm costs deal with the subject from a purely statistical point of view without involving principles of double-entry bookkeeping. Very often they fail to provide for proper correlation and interpretation of results after they are obtained." Does this involve one criticism or two of ordinary methods of farm accounting? What are the merits of the double-entry system? May single-entry accounts be "properly correlated and interpreted"?

5. "When economic conditions have so changed as to make it necessary to keep accounts on the farm, the farmer who says he doesn't have time to keep them will be about as well off as if he told the elevator owner to destroy the grain check, as he didn't have time to call for it. In either case he is not getting all he should from the operation of the farm." Are the two cases precisely analogous? Explain fully. Expound the word "necessary" in this quotation.

ADDITIONAL REFERENCES

Scovill, *Farm Accounting*. (In press.)
Roberts, *The Farmer's Business Handbook*.
Warren, *Farm Management*, chaps. xvi and xvii.
Cyclopedia of American Agriculture, Vol. IV, chap. vi.
Thomson, "The Use of a Diary for Farm Accounts," *Farmer's Bulletin 782, U.S. Department of Agriculture*.
Mowry, "Machinery Cost of Farm Operations in Western New York," *Bulletin 338, U.S. Department of Agriculture*.
Valentine, *American Economic Review*, Supplement, March, 1913, p. 102.
(Also numerous cost-of-production studies of the U.S. Department of Agriculture and state experiment stations.)

TOPICS FOR SPECIAL PAPERS

How to Make a Farm Inventory.
Outline of a Particular Set of Accounts and Their Results.
The Rôle of Cost Accounting in Modern Farming.
Work Records and Their Use.

VIII. PRINCIPLES OF VALUE AND PRICE AS RELATED TO FARM PRODUCTS

QUESTIONS

1. Distinguish between price, exchange-value, and utility.

2. Which one of these coincides with the "actual value" or "fair price" to which people so frequently refer?

3. Is value a quality which is absolute or relative? Does it reside inside an article or is it extrinsic to it?

4. So long as an article remains unchanged, is its value unchanged? In your answer do you consider that an article is unchanged only so long as its form or appearance is the same? Would its value be affected by a mere change in location? a change in time?

5. Does the market value of barley and rye in the United States depend upon the character of these grains or upon the nationality of our people or upon both?

6. Do you think that the market prices of any of our agricultural products would be revised if all private incomes above $5,000 were suddenly swept away? if every family were assured an income of at least $3,000? What is the meaning of "effectual demand"?

7. We often say that prices are low because the supply exceeds the demand. Is this expression accurate and complete? If supply is in excess of *all* demand, what will be the price of the article?

8. Show how your own demand for fresh fruit is affected by the principle of diminishing utility. What is marginal utility?

9. What is a marginal consumer? Explain the nature of his influence upon prices.

10. In the case of crops which come upon the market in large bulk during a short harvesting season, does the idea of marginal utility of a last unit hold good? Which bushels of wheat mark the margin of wheat consumption?

11. What idea of marginal utility governs the thrifty housekeeper when she is purchasing a winter supply of apples in the fall? Does the quantity stored depend upon what suppliers are asking for their stocks?

12. Explain what is meant by a demand schedule. Draw up a schedule of the demand for cranberries in accordance with the data in selection 146.

13. Make a demand schedule for potatoes according to the best information you can get. Make another for grapefruit. How do they differ? Why?

14. If a crop were doubled, would its price fall one-half? Look up actual price figures in the *Yearbook of the United States Department of Agriculture* or elsewhere and compare the prices of good and poor crop years.

15. If it appears that changes in supply result in more abrupt changes in the price of some goods than in the case of others, how do you explain it?

16. In your own feelings, do you find that added units of some goods are accompanied by a more rapidly diminishing utility than others? Illustrate. Does your demand for some articles seem to expand indefinitely?

17. What is meant by elastic demand? inelastic demand? Give several illustrations of each. Are there two separate classes of demand or is it merely a question of degree?

18. If there are several different uses to which a given article is put, does that increase or decrease the elasticity of its demand?

19. Does the existence of several fairly satisfactory substitutes for a certain product have an effect upon the demand for it? Does it make the demand more or less elastic?

20. Explain the effect that both these conditions (questions 18 and 19) are likely to have upon prices.

21. Is the demand for agricultural products in general elastic or inelastic? Is there evident difference in the case of articles of food and articles of wear? What other important classes are there?

22. Is our demand for food as such or for certain articles of food? for clothing or for certain textiles, skins, or other covering?

23. Are the great expenditures of *bon vivants* incurred to secure (*a*) quantity? (*b*) quality? (*c*) service? What do you mean by quality in this connection: (*a*) nutriment? (*b*) delicacy? (*c*) rarity? How about the social cost and return of such expenditures?

24. Does the cost of high living for some increase the high cost of living to others? Explain your whole chain of reasoning.

25. In general, does our demand for agricultural products rest upon a rational basis? Are some of our demands irrational? If possible, find in your own community an illustration of supplying the market with a poorer instead of a better article simply because the buyer demands it.

26. Millers say that the consumer demands bolted flour and polished rice. Does the housewife know that there is any other kind of rice or does she know the merits of other flour? How did present standards come into use?

27. Does the average consumer need the assistance of a pure-food inspector and a health department to instruct and direct his demand

in the present-day market? Can you cite any case in which they appear to have set up an ill-advised standard for consumers?

28. In what other ways does the government step in and alter the character of public demand? What would be the effect of an embargo upon the export of agricultural products?

29. Show how public opinion may become a powerful factor in demand.

30. By "supply" do you mean the total amount of goods in existence v. stock? What other factors may enter into the supply idea?

31. Is the supply of agricultural commodities limited absolutely or only relatively?

32. May the supply of an article which over a period of years is only relatively limited be absolutely limited in a certain city at a certain time?

33. Suppose that there is a very large quantity of peaches in the Chicago market upon a given day; does the whole of this amount exert an influence upon the determination of prices then and there?

34. Suppose that there is an equivalent abundance of wheat in Chicago; does it have an equally immediate and intense effect upon wheat prices? Explain both cases fully.

35. Do weather conditions represent absolute factors in the supply of agricultural products? Can the reduction of supplies due to unfavorable weather conditions be partially offset by additional outlays of labor and capital upon the crop?

36. Show how costs of production determine the relative limitation of agricultural supplies.

37. Try to find illustrations of farm products which are examples of constant cost-goods; of diminishing cost-goods; of increasing cost-goods.

38. Which of these classes is easiest to illustrate from agricultural experience? Which is easiest to illustrate from industrial experience? Is there any reason to suppose that a change in agricultural organization would alter these conditions? Relate all these answers to the principle of diminishing returns.

39. Is there such a thing as an oversupply of farm products (*a*) from the standpoint of the consumer? (*b*) from the standpoint of the farmer?

40. How did it happen that farmers supplied grain and cattle at such low figures as existed in the late eighties and early nineties? Can you cite any region or line of production in which they are doing the same thing now? For the same reason?

41. Does the mere fact that the per capita production of food products is as large today as it was at sometime in the past indicate

that prices today either are or should be on the same level that they were then? Why?

42. What bearing, if any, does the tariff have upon supplies of farm products in American markets?

43. Butter is selling wholesale at 27 cents per pound with a steady market. Then the government warehouse report appears, showing 10,000,000 pounds of butter less in storage than there was a year ago at this date. The price jumps up three cents within an hour. Explain the meaning of this advance and each step in the process by which it is brought about. Is it justifiable?

44. Is it conceivable that all the farmers producing a certain commodity might sell their product for less than some consumers would pay for this total output? How would it be possible for the farmers to make sure that they were securing the maximum amount the public was able and willing to pay? Is this the result we should aim to secure? How about the consumer's situation and the future of the agricultural industry?

45. Do farmers by having control of supplies have a potential control of prices? Are there any limitations upon the results they can accomplish through the exercise of this power?

46. What difficulties of organization and administration would confront the farmers of a given section in attempting to get together to control the market by (*a*) holding their product for a certain price? (*b*) by limiting acreage in order to induce scarcity prices? Illustrate with reference to tobacco, milk, citrus fruits, apples, wheat, and cotton. Give reasons in each case.

Compare with the possibilities of industrial control in the case of anthracite coal, petroleum, packing-house products, sugar, and farm implements.

47. May farmers organize to control prices without incurring the penalities of our anti-trust laws? Should they?

48. If you had control of the supply of a certain commodity, what principles would you follow in deciding upon the monopoly price which you would exact from buyers?

49. What is meant by "valorization"? What functions, besides merely naming a price, would the government have to undertake if it attempted to valorize a given farm product?

50. Is there a difference in purpose in case the government names a maximum price? a minimum price? What difficulties of administration would there be in these cases? From whom would objections come to either of these policies? Can you suggest any other means by which the government might better accomplish the same result?

51. What was done to adjust cotton values in the fall of 1914? What part did the government play in this? What part did private agencies play?

52. Does the establishing of conditions of free and open competition effect valorization upon a natural basis? What is needed to insure such a competitive condition?

53. What is the process of cornering a market? What limitations are there upon the possibilities of doing so? What markets have actually been cornered?

54. Can the farmer prevent the cornering of the market? Always?

55. Are there many small markets within the larger market process? What do we mean by the cotton market, the wheat market, or the egg market?

56. Does the world-market for cotton determine the price which the local buyer pays? Does the local buyer's price have any influence upon Liverpool conditions?

57. What part do dealers play in the making of prices? What is the "mechanism of the market" and what work does it perform?

58. What does it mean to say that prices in a certain city are "out of line with the general market"?

59. What is your idea of natural value? of normal price?

60. Do natural values change from year to year? Is the normal price of beef in this country rising? Does normal price depend upon cost of production? Whose cost, where some produce at lower costs than others?

61. What does the wholesale grain or cotton or butter dealer mean when he says that he considers prices above or below normal for this year or this season or this particular moment? Does he have costs of production in mind?

62. In the case of staple crops would it be possible around harvest time to compute what should be the normal price adjustment for that season? Do farmers and traders do this?

63. Is there a normal price for perishables?

64. Can the dealer in farm products set aside the laws of supply and demand? Can he take advantage of their operation? Can he shape them to his purpose?

PROBLEMS

1. The preamble to some resolutions of a certain "Taxpayers' Club" in August, 1914, read as follows: "WHEREAS, We note with alarm that the price of food products has risen far beyond that called for by the laws of supply and demand; and WHEREAS, This body believes that this bad practice can and should be stopped, and the

persons found guilty of such practices punished," etc. Do you believe that the first of these propositions is borne out by the facts of war prices in the United States? Do you think the Taxpayers' Club had adequate information upon which to base its action? Upon what data do you base your own conclusion?

2. Do you agree with the second proposition of the foregoing preamble? Just what practices should be stopped? By what means? Upon what grounds would judicial or executive officers decide when a price was natural and right and when it was artificial and wicked? Is the situation analogous to public utility rate-making? Should we look forward to government regulation of food prices after the war? Would regulation of methods be better than regulation of prices?

3. "The doctor goes out to see a patient and he knows what he is going to get for that service. The lawyer knows what he is going to get for trying a case. The banker fixes his rate of interest. The business man figures up his expenses and adds in the per cent that he wants for his profit. He knows what he is going to get. Everybody, with the exception of the farmer, has some way to protect himself on his investment. If we raise a bushel of corn that costs us fifty cents, we don't know that we are going to get a fair remunerative price for our labor and our product. If we raise one dollar's worth of stuff, we should get one dollar for it and a legitimate profit over and above that." Is the first part of this a correct statement of facts? Is the latter part sound economic philosophy? What is "a dollar's worth of stuff"? Could the world be run on a plan of guaranteeing every man his costs of production?

4. Can farmers control the price situation through the increase or decrease of production as flexibly as can the manufacturer? To what extent can they exert such control? Upon what consideration is the acreage in a given crop determined today? Would a rational economic basis of determining such acreage be possible? Would a rather large "factor of safety" be necessary? Why? Examine the figures for acreage and price of farm products as given in the *Yearbook of the United States Department of Agriculture* to see whether it seems that farmers govern their operations in such a way as to get the benefit of accurately meeting market needs. The figures for potatoes are perhaps the best to study. The accompanying chart (Fig. 1) shows them graphically. Does the acreage of a given year appear to be controlled by the price of the preceding year—i.e., the acreage being reduced after a low price and increased after a high price? Is this change of such an amount as to effect a readjustment and balance or to throw matters out of balance in the opposite direction? Is the situation more or less extreme in the case of crops which take many years to come to bearing, such as fruit trees?

5. Fig. 2 presents a profit-and-loss chart prepared by *Wallace's Farmer* after the plan of the Babson charts of general business conditions. "As an average of the last ten years, in April, butter sold at Elgin for 27.68 cents per pound, while corn was selling for 61.1 cents per bushel. It took, therefore, the value of .4528 of a bushel of corn to equal the value of a pound of butter. But during April, 1916, butter sold at Elgin for 34 cents, and No. 2 corn in Chicago for 76 cents. Butter therefore sold for .41 of a cent less than the price of

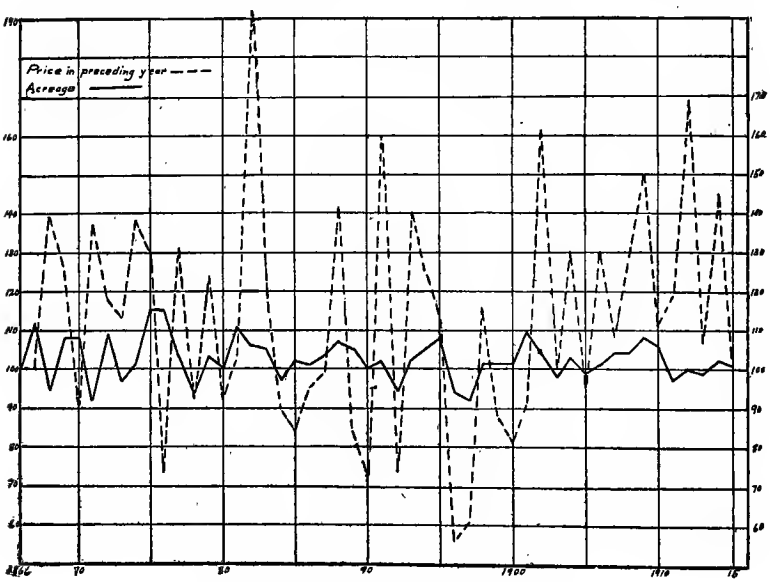

FIG. 1.—Prices and acreage of potatoes

corn would indicate. In May, butter has sold on the average for .3871 of the price of No. 2 corn per bushel in Chicago." In November, 1916, they wrote, "The long-delayed gain area H seems farther off than ever. The price of corn has increased so much faster than butter that the loss per pound for October reached a little over 7 cents. It begins to look as though the rather numerous dairy cattle sales which have taken place in certain localities were justified." In February, 1917, they add: "The slough of despond is becoming deeper. Consumers' boycott leagues and oleomargarine substitution have held down the prices of butter. The ten-year corn-butter ratio

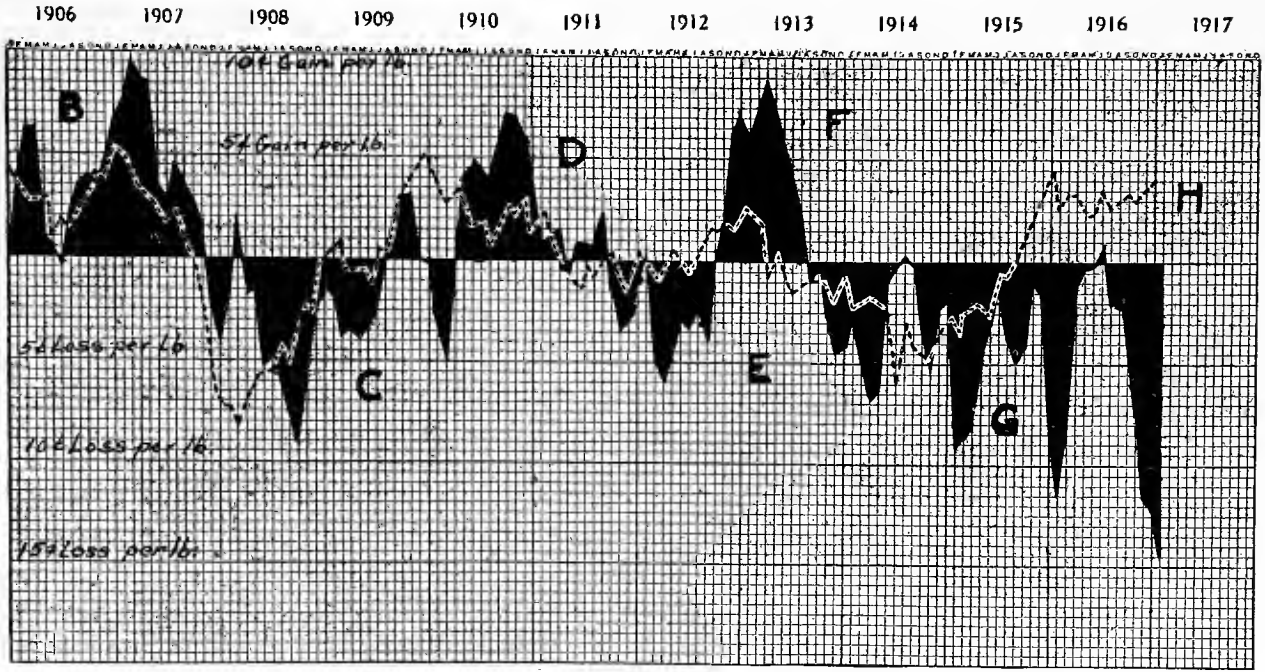

FIG. 2.—Butter profits and losses (the dotted line indicates general business conditions)

for January is .5296 of a bushel of corn to a pound of butter. This year, with 98½-cent corn, the price of butter should be 52.17 cents, as compared with the actual price of 37.5 cents. A loss of 14.67 cents is the greatest of any time in the past twelve years. After more than three years of solid loss, it surely seems that we should emerge into Gain Area H.

"What is the trouble? Have the dairy enthusiasts induced too many people to milk cows? If so, the present grief period should thin out the ranks sufficiently so that price conditions will eventually be more favorable." Do you believe that some such methods of

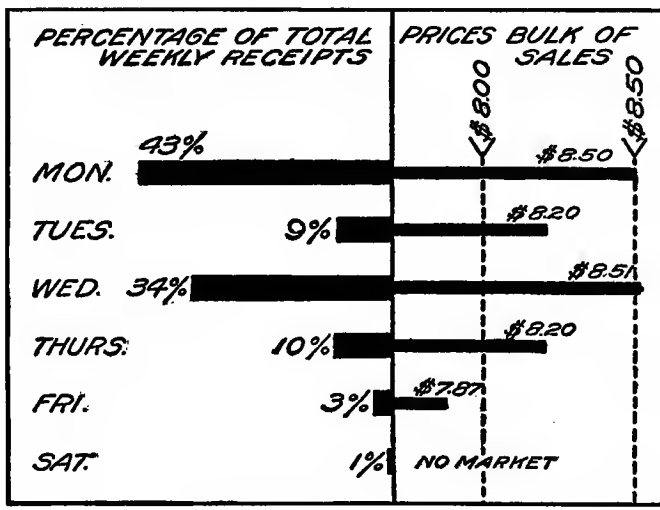

FIG. 3

studying the farm business statistically may be developed to the point where farmers can make their efforts as suppliers fit profitably into the demand schedules of consumers? Are other lines of business using such methods of forecasting their future policies?

6. Do you not ordinarily expect that a small supply will be accompanied by a high price and large supply by low price? How then do you explain the fact that "an examination of the market quotations for the bulk of beef cattle sales at Chicago by days of the week indicates that quotations rule highest on the days of largest receipts"? Average figures for a two-year period are shown in the accompanying chart (Fig. 3).

7. There are seventeen cars of Imperial Valley cantaloupes in the New York market on a certain raw and chilly Saturday morning in early June. What part does the cost of producing these melons have in the making of the price at which they sell? Does the cost of producing cantaloupes in the Imperial Valley have a part in determining prices in New York on the following Thursday? How about this cost of production and the average price of cantaloupes during the next year's shipping season?

8. "The services performed in the marketing process can be classified under one of the following heads: (1) assembling; (2) storing; (3) assumption of risk; (4) financing; (5) rearrangement; (6) selling; and (7) transportation." Which of these functions are to be regarded as properly a part of the work of the agricultural producer? Under what conditions and to what extent should some of them be turned over to other agencies? Why?

ADDITIONAL REFERENCES

Seligman, *Principles of Economics*, chaps. xii–xvi.
Seager, *Principles of Economics*, chap. vii.
Ely, *Outlines of Economics*, chaps. x and xi.
Carver, *Distribution of Wealth*, chap. i.
Weld, *The Marketing of Farm Products*, chaps. xii and xv.
Taylor, "The Prices of Farm Products," *Bulletin 209, Wisconsin Experiment Station.*
Nourse, *The Chicago Produce Market* (in press), chaps. vii and viii.
Kerr and Weld, "Prices of Wheat to Producers in Kansas," etc., H.R. Document No. 1271, 63d Congress, 3d session.
Warren, "Crop Yields and Prices and Our Future Food Supply," *Bulletin 341, Cornell Experiment Station.*
Davenport, "The Relation between Yields and Prices," *Circular No. 177, Illinois Experiment Station.*
(See also references at end of chapter following.)

TOPICS FOR SPECIAL PAPERS

Economic Effects of the Effort to Educate the Public's Demand for Farm Products.
The Irrational Character of Supply.
Price as an Adjusting Force.
Can Agricultural Producers Organize for Price Control?
The Effects of a Boycott upon Prices.
Is the Farmer's Fear of Overproduction Justified?
The Movement of Farm Prices Since the Civil War (or some shorter period) with Analysis of the Reasons Therefor.
The Relation of Market Organization to Prices.

IX. MARKET METHODS AND PROBLEMS

QUESTIONS

1. What features distinguish the "exchange" from other forms of market organization? Is there a hard-and-fast line of demarcation?

2. Make a list of as many lines of farm products as you can find handled by the exchange method. Are new commodities being added to the list from time to time? What characteristics must such commodities possess?

3. Explain the difference between "spot" and "future" transactions. Why is future trading carried on? Did you ever hear of future sales of eggs? of apples? of livestock? Explain why or why not in each case.

4. How does a "bucket shop" differ from a "legitimate" exchange?

5. What practices does the regular produce exchange forbid? Why? What power does it have with which to enforce its rules?

6. What is a warehouse receipt? Explain the system under which they are issued and the advantages resulting from their use.

7. What arguments are brought forward to prove that exchange dealing exerts a steadying influence on prices?

8. Would it be correct to say that the grain exchange is a market mechanism which operates to keep the markets in different cities in line with one another? Explain the method by which this result is accomplished.

9. What is a basis contract? Suppose there were an abnormal crop year, in which practically all the corn was of very inferior grade; would the fixed differences of price provided by the Chicago Board of Trade work equitably to all parties? What results might follow?

10. Can you suggest any other method by which basis contracts might be settled? What does the United States Cotton Futures act say on this subject?

11. Is it desirable to have national grades for staple farm products? Why? Do we have them at the present time? How are grades of apples, butter, and citrous fruit established?

12. What is a hedging contract and how is it used? Show how the farmer could protect his business by hedging.

13. What is a "bear" and why? a "bull"?

14. Would a bear raid on the market be harmful to the producer? Will the appearance of a strong bull interest result in higher prices to consumers?

15. Draw up as complete a list as possible of the farm products which are handled through auctions. What characteristics make them suitable for auction dealing? Mention several that are entirely incapable of being handled at auction. Why?

16. Does the auction system reduce the number of middlemen who handle the goods between producer and consumer? Does it add one more link to the chain?

17. What effect does it have upon the cost of selling? upon producers' price returns? upon consumers' prices?

18. Take the auction method as applied to the commodity in which you are most interested. What is the character of the demand brought together in the auction-room? Does the auction reach demand as fully as do private dealers? Does it stimulate demand as effectively as the private dealer?

19. Point out the similarities and differences in the organization and methods of the stockyards and the cotton or grain exchange.

20. Does the stockyards system make it easy or difficult for large buyers to manipulate prices to their own advantage?

21. Explain the method of the "call board." Does this method of dealing bring about full and free competition among buyers?

22. Does the name "broker" as used in the fruit and vegetable trade carry the same significance as when applied to the broker in the grain or cotton exchange? the stock broker? the real estate broker? What is a broker?

23. Point out the distinction between car-lot wholesaler, commission man, jobber, and broker. Are they generally separate individuals?

24. What is a speculator? Describe the process of speculation. Do all the classes of middlemen mentioned in the previous question engage in speculation? May persons outside the trade do so?

25. Could some of these middlemen be eliminated from the marketing process? Is the work they do superfluous? Could someone else do their work more economically? Back up all your statements with adequate evidence.

26. What is the relative charge made by the wholesaler, the jobber, and the retailer of oranges? Which does the most work? Explain the services of each. Does each suffer the same amount of loss or deterioration of goods handled? Does this enter into the consumer's price?

27. Are the middlemen who handle farm products specialists? What is the jobber's specialty? What is the country shipper's specialty? Can you cite any new form of specialization which has appeared in the handling of some commodity with which you are familiar?

28. Is parcel-post marketing designed to lower consumers' prices? raise producers' prices? Can it do both? Point out the principal difficulties from (*a*) consumer's point of view, (*b*) producer's point of view.

29. Would there be an actual social saving in marketing by parcel post—i.e., would there be less labor and material used up in the process? Or would there simply be a redistribution of effort and reward?

30. Get some local transportation rates and costs of packing for parcel post and for regular shipment. Figure how large a package of eggs, butter, vegetables, or the like one would have to get in order to make a saving of fifty cents. How much effort on the buyer's part would this transaction involve? Would it be worth while?

31. Is parcel-post marketing a means of saving some goods which would otherwise go to waste? Is it a means of giving city dwellers perishable products of better quality than can be secured under ordinary conditions?

32. What advantages are possessed by express companies for developing and carrying on direct marketing operations which are not enjoyed by the post-office?

33. Are public markets an institution of great age or of recent appearance? Why is there special interest in public food markets today?

34. Does retail selling in public markets stabilize prices in accordance with actual ratios of demand and supply? Does it avoid waste or deterioration of the goods? Does it effect greatest labor economy in selling? other economies?

35. Discuss the principal abuses in the grain business, the livestock business, or the shipping of fruit and truck crops which led to the movement for co-operative marketing associations. Has co-operation eliminated them?

36. What are the principal difficulties in the way of successful co-operative selling organizations? Are these due to (*a*) the nature of the commodity? (*b*) the nature of the producer? (*c*) the nature of the market?

37. What middlemen does the co-operative shipping association eliminate? Does it do the same work with greater economy or does it get some easy profits that formerly went to the local buyer and shipper?

38. Does co-operative organization of growers oblige city wholesale buyers to pay more than they otherwise would for their supplies? Does it result in higher prices to consumers?

39. Should a co-operative association have capital stock? Why?

40. What are the principal methods of arranging the control of the co-operative organization? Should every member have the same voting power? Why or why not?

41. Have co-operators succeeded in building up a large enough organization to control the whole process of selling any product in distant markets to (*a*) jobbers? (*b*) retailers? (*c*) consumers? Is one of these their goal?

42. Show the difference between the marketing ideas of the California legislature and those of the market-director. With which do you agree? Why?

43. Would it be feasible for state authorities to establish a complete system of inspection and grading and then market the product under a state brand? What economic benefits would result?

44. What gains would result from state-wide affiliation of producers in a great shipping organization? Would it have to be limited to a single commodity? What other limitations or difficulties?

45. Have you a state department or bureau of markets in your state? What is it doing or has it done?

46. Give an outline of the activities of the Office of Markets of the United States Department of Agriculture. Are they following up the lines of greatest benefit to the public? What other lines of work would you suggest?

47. Explain the market information service of the Office of Markets. To whom is this information available? What help is it to (*a*) the grower? (*b*) the shipper? (*c*) the buyer?

48. Give a brief explanation of the *Landwirtschaftsrat* system. How would this organization compare with American conditions if each state had a state market department affiliated with the Office of Markets of the United States Department of Agriculture?

49. Would such a national plan of market distribution be equally applicable to the marketing of perishables and of staple products? Why?

50. Do we have any kind of market organization today which is nation-wide in its scope? Try to get an illustration of one which is co-operative in character and of one which is a private company or corporation.

51. Do the plans of food control during war times form a workable or desirable pattern according to which we should organize the distribution of agricultural products after the war?

PROBLEMS

1. "Distribution of agricultural products in the United States has become largely identified with a speculative class of trading capitalists, because it has been found best for the producing and the consuming interests of the community that the risks of distribution should be localized in a separate commercial class whose members are in a position to inform themselves as to all the factors, past, present, and prospective, affecting the future course of prices. If the risks fell upon the farmer, it would increase materially the risks of capital required, thus raise the rate of interest he would have to pay, increase the cost of production, and consequently tend to reduce consumption by rise of price to consumers." Is this statement correct? Does it constitute a defense of the middleman?

2. "This bill [Cotton Futures act] legalizes and licenses gambling in cotton futures, which we promised to suppress. Do you dare go to the raiser of cotton—the farmer who makes from 1 to 20 bales of cotton a year—and say, 'I voted to legalize gambling on the New York Cotton Exchange. I voted for a bill that will increase the number of "phantom" bales dealt in'? Such gambling in futures increases the supply by the addition of the paper supply sold by the 'short' speculators who are bearing the market, a practice which it is admitted depresses the price of cotton." Do you admit all these statements? Is any factor overlooked? Should all exchange transactions be limited to spot dealings? Give full reasoning.

3. Is speculation the same thing as gambling? "The American system of distributing farm products is essentially a speculative system from beginning to end—speculative in the sense that after the products pass out of the producers' hands until they pass into the consumers' control there is not a moment nor a stage in the distributive movement during which the one who has legal control of the goods does not run the risk of a rise or fall in the value of the property." Show clearly where the line is to be drawn between speculative operations which are beneficial and those which are harmful.

4. Show the relation and the distinction between speculation and the manipulation of prices. "There is need of the greatest care in reasoning upon the complex play of cause and effect in the emergence of prices. Shall we say next winter that eggs are high because the men who store eggs get together and boom the price? Or shall we say they are high because exports from Russia and Denmark have been cut off and some of the home supply called for by South American markets, and be glad that the foresight of dealers led them to accumulate so large a stock as they did last April?" Answer this riddle.

5. A certain auction company advertises: "In case of 'trouble' in or near ———, divert your cars to the ——— Auction Company. Any cars of perishable goods arriving in damaged condition should be immediately turned over to the ——— Auction Company for disposition. Holding perishables indefinitely means deterioration, car service, demurrage, waste of time and money." Why should these particular cases be cited? Is this the only field of auction selling? Is it the most important?

6. "New Yorkers today are buying butter from Minnesota, eggs from Iowa, cantaloupes from Arizona, and apples from Oregon. Every one of these articles can be raised in our climate and the present enormous cost of long-distance marketing saved." Is this argument good? Can you show how the costs of marketing from a distant point may be less than those from the near-by point? What other factors may influence the situation?

7. "Whenever it is possible to make human nature over, eliminate greed from one man, sloth from another, dishonesty from another, and above all graft from the promoters, then co-operation in the growing and marketing of produce will be a success and not before." Suggest some ordinary business devices now in use by co-operative organizations that have welded ordinary imperfect mortals into effective working systems. Have the courts upheld the right of the association to demand that members live up to their agreements?

8. There is much talk in certain quarters about the "scientific marketing of farm products." Is there a science of marketing? What is meant by the expression "a scientific approach to the problem of marketing"? The following chart has been used to illustrate unscientific marketing. What was wrong?

CHART SHOWING MOVEMENT OF BARTLETT PEARS FOR ONE WEEK, IN THE CITY OF NEW YORK

Day	Date	Cars	Boxes	Average
Monday	July 24	52	27,100	$2.04
Tuesday	July 25	27	14,045	2.21
Wednesday	July 26	23	11,765	2.48
Thursday	July 27	28	14,550	2.48
Friday	July 28	31	16,195	2.57

9. The Industrial Commission (1900) said: "In the distribution of livestock, of cotton, grain, tobacco, and wool, the main tendency is to eliminate the more expensive middleman. The telegraph and mail bring to the cotton and grain producers the prices of the world's markets day by day. The shipper simply ascertains by what means

the transfer from producer to consumer can be effected most economically. To err is to eliminate himself. An attempt to impose even a triflingly small excess of charges on cotton or grain at one distribution point will be taken advantage of by competing points." Can you illustrate the operation of such a process of elimination? Has the same movement gone on since 1900? Is it apparent in other products than those mentioned, such as fruit, truck, and dairy products?

10. "Two years ago tomatoes were scarce and high. This enabled the co-operative association to sell its product, even the inferior stock, at high prices. The buyers were on the ground grabbing for the cars. The association took all the credit, claiming they forced the wicked buyers to bid over each other. News of the great profits went round and this year everybody had tomatoes, oodles of them. As a result, the association blew up. Buyers would not even bid, but asked for goods on consignment. Acres of fine tomatoes went to waste. The law of supply and demand stepped in and changed the order as it always has and always will." Does this point to a limitation and a danger which co-operative associations must face? Explain. How can it be met?

11. "A correspondent points out that two articles of food are practically always to be found in every part of the United States, and almost always at a low price when the distance which they are transported is taken into account. The two articles are oranges and bananas. The price of the latter, in fact, is almost stable and uniform all over the country year in and year out, although bananas are a perishable product and are shipped thousands of miles. The marketing of oranges and bananas is extensively organized—the former by co-operative associations, the latter by a trust." Should we look to organizations like the United Fruit Company to reduce marketing costs in the future? Have the meat-packers reduced costs?

12. "A conspicuous feature of the American grain market is the existence of a large 'visible supply' during the greater portion of the year." Exchange reports from day to day record the increase or decrease of this visible supply and make comparisons with conditions of previous years. Competitive dealing in the light of this information tends to eliminate large profits to middlemen. "On the other hand, products such as fruits and vegetables, where no storable supply exists, because of their perishable nature, have shown but a slow tendency to get rid of the more expensive methods of distribution." Explain the two propositions here laid down. Can you show that the organization of the produce trade today is such as to make possible the securing of fairly reliable information as to the visible supply of even perishable commodities? Is this calculated to have a stabilizing effect upon prices? How?

13. A prominent railroad official estimates the following annual losses due to our "loose system of distribution":

100,000 cars of fruit and vegetables which rot on the ground for lack of shipping and storage facilities and knowledge of receptive markets, at $350 a car	$ 35,000,000
Loss in cornstalks, rice, flax, and other grain straw, now burned	250,000,000
Additional amount which the farmers should receive if by co-operation they knew when and where to sell their products to best advantage	1,500,000,000
Total	$1,785,000,000

Are all these items "losses" or "wastes" in an absolute or only in a relative sense? If all could be eliminated would the nation be a billion and three-quarters richer? Would farmers? In case you had power to remedy one of these three defects each year for three years, in what order would you go at them?

ADDITIONAL REFERENCES

Brace, *Organized Speculation.*
Powell, *Co-operation in Agriculture*, chaps. vii and viii.
Weld, *The Marketing of Farm Products.*
Huebner, *Agricultural Commerce.*
Adams, *Marketing Perishable Farm Products* (Columbia Studies, No. 170).
Nourse, *The Chicago Produce Market* (in press).
Wiest, *The Butter Industry in the United States*, chaps. v–viii (Columbia Studies, No. 165).
Hibbard and Hobson, "The Marketing of Wisconsin Butter," *Bulletin 270, Wisconsin Experiment Station.*
Industrial Commission (1900), *Distribution and Marketing of Farm Products*, Vol. VI of the Commission's report.
Bohannan and Campbell, "A Preliminary Study of the Marketing of Burley Tobacco in Central Kentucky," *Bulletin 202, Kentucky Experiment Station.*
More and Dorland, "Commercial Handling, Grading, and Marketing of Potatoes," *Farmers' Bulletin 753.*
Potts and Meyer, "Marketing Creamery Butter," *Bulletin 456, U.S. Department of Agriculture.*
Schleussner and Kitchen, "Marketing and Distribution of Western Muskmelons in 1915," *Bulletin 401, U.S. Department of Agriculture; Bulletin 315* on similar subject.
Bassett, *et al.*, "Co-operative Marketing and Financing of Marketing Associations," *Yearbook of the U.S. Department of Agriculture*, 1914; "Public Markets," *ibid.*
Sherman, *et al.*, "Studies of Primary Cotton Market Conditions in Oklahoma," *Bulletin 36, U.S. Department of Agriculture.*

McConnell and Carp, "A Study of Cotton Market Conditions with a View to Their Improvement," *Bulletin 476, U.S. Department of Agriculture;* see also *Bulletin 457.*
U.S. Commissioner of Corporations, *Report on Cotton Exchanges.*
———, *Report on the Beef Industry.*
———, *Report on the Tobacco Industry.*
U.S. Department of Labor, "Butter Prices from Producer to Consumer," *Bulletin 164, Bureau of Labor Statistics.*
———, "Sugar Prices from Refiner to Consumer," *Bulletin 121, Bureau of Labor Statistics.*

TOPICS FOR SPECIAL PAPERS

An almost infinite number of suitable themes will occur to the person who examines those lines of marketing with which he is most closely in touch. A few others may be mentioned:
The Good and Evil of Speculative Trading.
Anti-Option Bills and the Regulation of Future Dealing.
National Grades for Farm Products.
The Usefulness and Limitations of Auction Selling.
Methods of Handling and Selling Tobacco, Wool, or Other Local Product.
Modern Organization of the Trade in Perishables.
City Marketing Problems, Public Markets, Parcel Post, etc.
Achievements and Difficulties of Co-operative Selling Associations.
How Wide Should Be the Scope of the Co-operative Selling System?
The Movement toward Federation of Local Co-operative Associations.
The Market News Service of the Bureau of Markets.
The Market Department (or regulations) of ——— (your state).
Market Developments of the Last Three Years in New York.
The New California Legislation.
Foreign Trade in American Farm Products (or some particular article).

X. TRANSPORTATION AND STORAGE FACILITIES AS FACTORS IN THE MARKETING OF FARM PRODUCTS

QUESTIONS

1. Is there a complete analogy between the railroad's charging what different classes of traffic will bear and the farmer's incurring transportation costs proportionate to the value of his product?

2. Does charging according to value of service and according to cost of service produce approximately similar rates in the case of railroad traffic? ocean carriers?

3. Do farmers gauge their outlays upon road-building in accordance with the value of the products to be hauled?

4. Explain the principal steps by which the exportation of agricultural products of the Mississippi was made practicable and profitable. What effect did this have upon prices in the Middle West? in Massachusetts? in England?

5. Explain how both the supply and the demand side of the market for cantaloupes are affected by the development of cheap refrigerated transportation from the Far West. Do low railroad rates harm or benefit the eastern farmer?

6. What would be the effect upon city milk prices if our railroads were swept out of existence? What effect has the building of electric lines had on milk prices? Explain both cases.

7. Would the additional work needed to take proper care of the eggs on the average Mississippi Valley farm be an expenditure of labor under conditions of diminishing or increasing returns? Might it be sometimes one and sometimes the other? Check your answer against the figures in *Agricultural Economics* on p. 579 showing monthly distribution of losses from bad eggs.

8. Explain the method of buying eggs "loss off" and its effect upon the egg business.

9. Is the local creamery's method of buying milk according to butter-fat test and selling the product co-operatively suited to the marketing of eggs also? Is this method in actual use?

10. Does every improvement in the transportation system, such as quicker service, lower rates, or better refrigeration, tend to move the field of production still farther from the consumer? Is this result desirable or even tolerable? Explain.

11. Give a brief account of the method by which cars are refrigerated. See what you can find out about pre-cooling methods.

12. How do you explain the fact that the average wagon haul was shorter in 1915 than it was in 1906? How much shorter was it?

13. Does the farmer consciously figure the cost of team hauling as a factor in his selling price? Is the indirect effect the same as if he did? How?

14. Does a straight road make the cheapest hauling between two points? Is the actual cost of hauling upon a given road the average of the cost upon its several parts? the cost of its most difficult portion? Why?

15. Take the roads of some farming section with which you are familiar. Assume that you have a limited amount of labor and capital to expend upon them—say $200 and 250 man-days of labor. Could you apply this with largest returns by (*a*) scraping and side-ditching present roads? (*b*) by resurfacing with gravel or crushed stone? (*c*) by cutting down grades? (*d*) by relocating the road along a contour line?

16. Explain the "red ball" or similar special freight service for perishable farm products. How do the rates of speed on such preference freight compare with rates on ordinary freight? on passenger service?

17. Go to your local freight agent and find out how charges on the different classes of service compare; on car-lot and less than car-lot rates. What is the minimum carload? Is this the maximum?

18. What is a "passing report" and what purpose does it serve?

19. What is the "diversion" privilege and how is it used in the marketing of agricultural products? Explain its advantages.

20. Can you demonstrate that there are economic gains from the granting of concentration rates which justify the Interstate Commerce Commission in compelling the railroads to grant such rate concessions?

21. Explain the purpose and method of storage-in-transit. Does the use of this privilege result in a social saving or merely an individual gain?

22. Is car shortage in the United States a matter of an absolute scarcity of rolling stock or of a relative undersupply of certain types of cars at particular times and places?

23. Is the car supply handled in such a way as to give it maximum power to satisfy shippers' needs? See what you can find out about the methods followed by the railroads to supply shippers' needs.

24. Do shippers sometimes interfere with the efficient utilization of cars? How could this be avoided?

25. How has the problem of the rapid and economical handling of products at the railway terminal been met in the case of (*a*) iron ore? (*b*) bulk grains? (*c*) package freight, particularly fruit, vegetables, poultry, and dairy products? Is the loss due to poor facilities greater or less in the last case than in the other two? Is it more difficult to

devise adequate methods and equipment for handling this class of traffic? Why? Do you know of any place where it has been done satisfactorily?

26. What is demurrage and why is it charged? What is "free time"? "reciprocal demurrage"? Look up "average" agreements.

27. Are food products injured by cold storage for thirty days? three months? nine months? Can the business judgment of dealers be relied upon to keep the storage period down to safe limits?

28. Should the consumer be told when he is buying storage goods or left to judge goods entirely by appearance and flavor?

29. Would prices presumably be affected by placarding cold-storage goods as such? Why? Would the supply situation be affected thereby? the demand situation?

30. How long are eggs actually held in storage on the average? poultry? beef? What natural or economic forces tend to limit the period?

31. Can cold storage be used as a means of manipulating market stocks of food products as a means of securing abnormally high prices? Are there any automatic checks upon such speculative operations? Relate your answers to the principles of value brought out in the preceding chapter.

32. Does the average American farmer prefer to sell his products to the professional traders at harvest time or to hold them to some future time in the hope of getting a higher price? Why? What commodities?

33. In case he stores his crop, is any advance in price a net gain? What deductions must be made from such gross profits?

34. Is the cost of storage on the farm greater or less than the dealers' cost of storage? Is the loss or deterioration greater or less?

35. Does it cost the farmer more to deliver his products to the dealer or shipper at harvest time than later, or does it cost less?

36. Is it certain that there will be an advance? Would there be if producers hold their goods off the market now and all dump their product later? in case they "hedge" at the time of putting in storage?

37. Even if there should be an advance in price, is it certain that the farmer will be in a position to take advantage of it? What might prevent his doing so?

38. Does the fact that farmers are in a position to store their crop or to sell it at once, as they see fit, improve their strategic situation in bargaining with prospective buyers? Explain.

39. How is it possible for the farmer who needs money at once to pay debts to get this money and still retain control of his product, so that he may benefit from a later advance in the price?

40. Explain the "public" warehouse system. Do we have any government-owned warehouses for agricultural products? Would it be desirable?

PROBLEMS

1. "The volume of export business is an important factor in the price of mill feed, such as bran. In recent years ocean rates on wheat have been considerably less than the rates on flour, thus decreasing export trade in flour. Mills in this country have the capacity to grind every bushel of our wheat, and every bushel ground in this country leaves sixteen pounds of mill feed for the American farmer. Millers have for years been trying to secure an equalization of wheat and flour rates on ocean vessels. Should dairymen join with them and accomplish this result, mill-feed supplies would be enlarged and prices lowered." Is this a case of discriminatory rates? Is a rate of fifty cents more on flour than on wheat justified by greater cost of handling? Draw up as full a list as you can of cases of discrimination (*a*) between different sections of production of agricultural products, (*b*) between different farm products or between farm products and manufactured articles, etc.

2. "Nobody appears to try seriously to lay the blame for high prices at the door of the railroads. In the five-year period 1884–88 the average cost of carrying a bushel of wheat from Chicago to New York by rail was 16.32 cents; in 1908, 10.60 cents. The railroad gets only about 1 cent a pound for bringing butter from the Mississippi River to Boston, and chickens are brought from Chicago for about $\frac{3}{4}$ of a cent a pound. Whether or not, in spite of this situation, the railroads are still charging too much and making profits too large would take the most expert investigation to determine." Have rates upon farm products in general fallen in proportion to the Chicago–New York rate on wheat? Is the comparison with previous rates or a study of the net profits of the roads the better basis for judgment on the correctness of rates?

3. "All employees of the railroads have instructions 'to secure additional revenue.' Very few lines can be trusted. They will promise you lower adjustments and then they will begin to plan increases instead of reductions. Look back over the past four years and you will find many increased rates, lengthened schedules, higher refrigeration charges, and other underhand methods which are eating at the arteries of your business and impeding the proper distribution of fruits and vegetables." Contrast these bitter words with the quotation above (2). Can you explain the difference? (The former is from the Massachusetts [1910] cost-of-living report, the latter from the Traffic Committee of a trade association [1916].)

4. "The extent to which rates should be graduated according to distance is still one of the greatest transportation problems. Some believe in 'postage stamp' rates, others in a rigid adherence to the distance principle. It is believed by most students of the problem, however, that the compromise system gradually developed by the railroads—in spite of many inconsistencies and discriminatory practices—has worked out to the greatest advantage of everyone concerned and has been a great factor in the orderly development of the country." Explain this fully. Do you agree?

5. "Until the railway service of the United States became finally and fully connected East and West (about 1861) the greater part of the substantial food of each community was of necessity produced within a short distance of the populous centre. Under these conditions the best land of each state, near towns and cities, was necessarily devoted to the production of the coarser staples, i.e., Indian corn, hay, meat, potatoes, and the like. When distribution became less costly, those coarser and more bulky products of agriculture became border crops, and much land which had previously been devoted to their production in the East was now released and became used for market gardens, small fruits, and such purposes." Was there an economic gain to society from this process? Was there a benefit to eastern landowners? to western landowners? to workmen (*a*) in their cost of living? (*b*) in their industrial opportunities? (*c*) otherwise?

6. "The agricultural promotion projects of railroad companies include, not only efforts to make farms yield greater returns and to increase the number of farmers, but also efforts to make more land available for farming purposes." May the zeal of the roads to get traffic lead to the opening up of unprofitable or less profitable areas? May it lead to local or to general overproduction? A grower writes: "You railroad people have got us to raise a whole lot of stuff and now we can't sell it." Is such a difficulty temporary or permanent? What was the economic benefit or harm wrought by Mr. J. J. Hill's agricultural development work?

7. In a certain Red River Valley community in 1860, "the principal crops as measured by the number of bushels in order of their importance were corn (!), potatoes, oats, wheat, and rye. Small quantities of butter, cheese, tobacco, maple sugar, barley, hay, and slaughtered animals were also produced. This period of diversified agriculture lasted until about 1876. After that more railroads and cheaper freight rates brought the one-crop system and the bonanza farms for which the Red River Valley is famous." Can we lay the blame for the one-crop system on the railroad in general? Was there an economic gain to the people of the United States when the Red

River Valley went in for wheat-raising? Explain. Is a one-crop system profitable to the railroads? Why? Is there a suitable degree of diversification which is still more profitable? Why?

8. A bill was introduced in the present Congress (1916–17) designed to limit the period for which any food products might be held in cold storage to three months. Was it a wise measure? Explain just what effect it would have upon the present organization of the egg, butter, and meat business.

9. "The general belief that any reduction in freight rates will go to the producer is entirely erroneous so far as it applies to wheat. The reduction which was intended for the producer in fact went to the consumer, reducing the price to the farmers of the entire world. Even if the entire freight charge were wiped out, it would not, in the long run, add one penny to the price received by the farmer, because sellers in the Liverpool market would offer wheat lower." Is this argument sound? Might it appear to be quite true under certain circumstances and doubtful or not true under others? Does the fact that this statement was based upon the experience of 1898 have any significance? that it was uttered by a Dakota farmer?

10. "The farmers' elevators are slowly, year by year, driving out the independent and the line elevators. Now they are trying to get co-operatively owned terminal elevators. There is also a movement for state-owned terminal elevators. Thirty years ago the railroads owned and controlled the terminal elevators, for in no other way could adequate storage be found for their grain shipments. Abuses of various kinds arose, but there also grew up adequate government supervision and control." What advantages can you point out that there might be from taking terminal elevators out of the control of the railroads? out of control of other private corporations? Would it be better to make them state institutions or to have them owned and operated co-operatively?

ADDITIONAL REFERENCES

Johnson and Huebner, *Railway Traffic and Rates.*
Weld, *The Marketing of Farm Products*, chap. xi.
———, *Private Freight Cars and American Railways* (Columbia Studies, 1908).
White, "Demurrage Information for Farmers," *Bulletin 191, U.S. Department of Agriculture.*
"Reducing the Cost of Food Distribution," *The Annals*, November, 1913.
National Conference on Marketing and Farm Credits, *Proceedings* of the third annual conference.
King, *A Study of Trolley Light Freight Service and Philadelphia Markets.*
"Economic Surveys of County Highway Improvement," *Bulletin 393, U.S. Department of Agriculture.*

TOPICS FOR SPECIAL PAPERS

How Transportation Facilities and Costs Influence the Farming Conditions of ——— County (or other area).

An Economic Survey of Local Highway Needs.

Latest Development in Refrigerated Car Service and Their Effect on Farming.

Present Methods and Services of Cold Storage Warehouses.

How Local Marketing Operations are Affected by Storage in Transit or Similar Special Traffic Arrangements.

Relations of the Public Warehouse to the Farmer and the Public.

Why Public Warehouses Should Be Compelled to Make Periodic Statement of Their Holdings.

Terminal Facilities in ——— (some near-by city).

The War and the Transportation of American Food Products.

The Routing of Shipments of Grain and Cotton in the United States with Reasons Therefor.

XI. THE RENT AND VALUE OF FARM LAND

QUESTIONS

1. What is meant by "distribution" in the language of the economist? Distribution of what?

2. It has sometimes been said that distribution is the only really important problem in practical economics. Is this true? Is the amount to be distributed something about which we need not worry or over which we have no control?

3. What relation does this section bear to the section dealing with production? to that which deals with consumption? Can you show how good distributive conditions would improve conditions of production?

4. Who are the parties to distribution? By what mechanism, devices, or institutions is the process of distribution effected? What is an economic institution?

5. State briefly the so-called Ricardian doctrine of rent. What is meant by "original and indestructible powers of the soil"? (Look back to chapter iii, particularly Section C, in answering this question.)

6. What is meant by a "differential" return? Under what conditions will there be no differential? Would we then have a no-rent society?

7. Is such a condition a practical possibility? Do we have rent at the same time at which there are unused lands? fertile lands which are unused?

8. What is the margin above which differential productivity is measured? Are we concerned about physical productivity or value productivity?

9. When we talk about using the "best" land first, do we necessarily mean the most fertile? What advantage may lead to its employment in advance of other land?

10. In general, what will be the trend of prices of the product when poorer and poorer areas of land are taken into cultivation? What effect will this have upon the returns of better tracts? upon rent?

11. Do high rents and high prices of agricultural products go hand in hand? Can you identify one as cause and the other as effect? Which is which?

12. Show clearly the application of the principle of diminishing returns to the case of land rent. Is there an intensive as well as an extensive margin from which we measure differential returns and compute rent? (See Problem 7, chap. iii.)

13. Can you describe a condition under which all the land within a given country would command a rent payment? Under such a condition where is the datum line from which you measure your no-rent margin? Suppose this to be an island cut off from communication with all other lands, does this alter your answer? Would such a condition (i.e., rent for every acre) be possible over the whole earth?

14. Are advantages of land which are due to its situation "original and indestructible"? Are transportation companies restricted in their power of upsetting such natural conditions? (This question should be related to several in the preceding chapter.)

15. Is the actual productivity of a piece of land due to its own intrinsic qualities or to the way in which some person is employing it, or to both?

16. Does the man who operates his farm more skilfully than others and therefore secures from it an extra return get the benefit of this difference, or does he have to hand it over as rent?

17. Is there an average or ordinary degree of efficiency of farm users which is discernible to those who are bargaining over rent payments?

18. Do the good farmers tend to locate on the good lands and the poor farmers tend to be relegated to the inferior lands? Why and how?

19. What do you mean by "good" and "poor" farmers in the preceding question? If the landlord is looking for the tenant who will pay him the largest rent, is it certain that he will find this requirement met by the man who is technically most efficient? May someone else overbid him because he is willing to live more cheaply or work longer hours or do more disagreeable tasks? Are these types of *competitive* efficiency?

20. Does the payment which is referred to in ordinary commercial usage as rent differ from what we have been discussing as economic rent?

21. Define contract rent and distinguish it from economic rent. Does it include payment for the use of other things than land? Does it, in the case of bare land, represent a market price for the use of land which is different from theoretical amount which would cover the exact economic differential?

22. Do contract rents tend to crystallize about certain more or less customary rates? Do farms of different quality lying side by side often rent for the same price? Do farms rent for the same rate in good years that they do in poor years? Are such rates averages of the productivity of a period of years?

23. Does cash or share rent conform more closely to actual conditions of productivity? Why then do we continue both systems?

24. Are many forms of so-called renting contracts also contracts for labor? Illustrate by Iowa bushel-renting and southern share-cropping.

25. May such a contract also be a contract for supervision or entrepreneurship? Illustrate by the stock-share lease.

26. May it also be a contract for the use of capital-goods? Give several illustrations.

27. Do the general propositions as to the play of supply and demand forces in the making of prices hold good in the bargaining of landlord and tenant?

28. Does the ordinary purchaser of farm land buy with a view to the return which the land may be expected to yield? Is it correct to think of him as buying an income?

29. How much is an income of $500 a year worth? How much would you have to invest in farm-land bonds at par to get an income of this amount? in individual mortgages? in a hardware and feed business? Are all these incomes equally sure year in and year out? Do they all involve the same amount of responsibility and labor of superintendence on the part of the recipient?

30. Suppose that in a given community it has been usual to get 8 per cent on good first mortgages, and a change in rural credit arrangements makes it possible to secure such loans at 5 per cent, is it likely that persons who buy land will pay more or less under the new conditions?

31. What would be meant by the statement that land value is the "capitalization" of its economic rent? What is the capitalization of a corporation?

32. In your home community does land actually sell for a sum which capitalizes its earning power at the going rate for similar investments?

33. Cite any conspicuous departure from this rule with which you may be familiar. Can you explain it?

34. What is overcapitalization of a corporation? May land be overcapitalized? Can you cite a good example and explain the reasons?

35. What would be the difference between a speculative stock and an investment stock? Is land a frequent object of speculative activities? Why? What effect does this have on market values?

36. Does speculation in land have any relation to the question of tenancy? Explain.

37. What effect does the growth of urban centers have upon farm values in the region, and why? improvement of transportation

facilities? change in the technique of farming? rise in the general level of prices?

38. Does the value of inferior lands (e.g., swampy, semi-arid, rough) tend to be higher or lower today, compared with the prices of the better lands, than it was ten or twenty years ago? Give full reasons for your answer.

39. What was the value of "abandoned" farms twenty years ago? Why were they abandoned? What is their value today? Why?

PROBLEMS

1. "Rent tends to vary inversely with (1) efficiency of managers, workmen, and equipment in competing regions as a whole, (2) prices of farm equipments, wages, and other operating costs, and (3) the abundance of good land." Are these propositions true? If so, explain and illustrate. If not, point out any errors.

2. Suppose that wheat is raised by a uniform system of extensive cultivation and that the demand is such as to take 300 units (of a million bushels each) at a price which would pay the current rate of wages to one-third of a day's labor (and its suitable capital equipment). The wheat land is of three grades, A, B, and C. On the first, 100 days' labor will produce 300 units of produce; on the second, 100 days' labor will produce 250 units; and on the third it will produce 200 units. Under these conditions how many grades of land will be used? Will rent be paid? How much? Suppose the increase of home population or the opening of a foreign market creates a demand for 550 units at a price equivalent to two-fifths of a day's wage, what rent will be paid and to whom? Now, if the demand increases to 600 units at a price to pay the wages of one-half day's labor, what land will be utilized and what rent paid upon each grade? Make a chart to illustrate the three conditions.

3. In case there were only two grades of land, A and B, but that a second hundred days' labor on A would produce 250 units of product and a third like application would yield 150 units, whereas a second application of labor to B would produce 200 units and a third would give 125, what land would be used and what rent would be paid under each of the three price conditions? Make a chart to illustrate.

4. "The doctrine of rent breaks down because the doctrine of marginal cost is absurd. Suppose that the marginal cost of wheat to a certain farmer is 70 cents per bushel and that wheat is selling for 70 cents. If the average cost to this farmer is 50 cents, he will be under strong incentive to increase his output. This marginal cost does not operate so powerfully as average cost in price determination,

and thus the rent theory breaks down." Is this view correct? If the fact is as stated, does it constitute an impeachment of the doctrine of rent or of the farmer's economic intelligence?

5. "Under conditions of free competition the landlord cannot get a penny more than the economic rent of his land. Likewise, if competition is free and active, the tenant cannot get the land for a penny less than the amount of its economic rent." Show carefully, step by step, how this process of adjustment would be worked out. Is competition of this sort the rule in American farming communities? What is the long-run tendency?

6. A Congressional committee reports: "One of the many causes contributing to the advance in prices is the increased cost of production of farm products by reason of higher land values." Explain fully how this operates from cause to effect or, if you think the statement incorrect, explain fully your grounds for differing.

7. "The profit required by the landlord is in proportion to his risk and trouble. In Tompkins County, New York, the landlords who rented for cash made an average of 5.2 per cent; those who owned part of the stock, paid part of the expenses, and received half of the receipts made 9 per cent. The tenants who rented for cash made an average of $604 for their labor; those who rented for a share made an average of $342." Does this statement correspond with the facts in your own community? Does this apply to economic rents or only to contract payments from lessee to lessor? If one rents bare land, furnishing neither stock nor implements, is there likely to be a higher average rental paid in the sharing of product than in cash renting? What risk is involved?

8. "The first settlers are seen to have established themselves on the barren soil of Massachusetts. The whole continent was before them, but, were the reader inclined to designate the soils of the Union least calculated for the production of food, his choice would fall upon the rocky lands first occupied by the hardy Puritans. Everywhere it has been the lighter and poorer soils which have first been used." Is this a refutation of the fundamental propositions upon which our rent theory rests? Explain fully.

ADDITIONAL REFERENCES

Standard texts in general economics.
Special treatises on distribution, e.g., Carver, *Distribution of Wealth.*
Johnson, "Rent in Modern Economic Theory," *Publications of the American Economic Association*, 3d series, Vol. III.
Walker, *Land and Its Rent.*
George, *Progress and Poverty.*
Carver, *Principles of Rural Economics*, chap. v.

Taylor, *Agricultural Economics*, chap. ix.
———, "Two Dimensions of Productivity," *American Economic Review*, Supplement, March, 1917.
Tichenor, *Farm Contracts between Landlord and Tenant.*

TOPICS FOR SPECIAL PAPERS

The Theory of Rent Illustrated from Concrete Farming Practice.
Local Renting Contracts.
The Rate of Capitalization Exhibited in Local Land Values.
Analysis of the Differential Advantages Which Are Taken into Account in Valuing Farm Lands.

XII. LAND TENURE AND LAND POLICY

QUESTIONS

1. Does the landowning farmer work harder than the tenant? Why? Is he likely to follow a better farm practice? Why?

2. Explain the reasons, both of inclination and of necessity, which would explain a smaller percentage of livestock on tenant farms.

3. Does tenancy produce as good results as ownership under a one-crop system of farming? Why?

4. Is tenancy as satisfactory as ownership if the term of the lease be long? How long should it be?

5. What sort of a rotation can be followed under a one-year-lease system? What effect does an extremely short tenure have upon the tenant's equipment of implements? of stock? upon his policy with regard to fertilizer? upon his acre-yields? Give the reasons as fully as possible in each case.

6. Is a one-year-lease system "a national waste"? Explain.

7. Does the fact that a certain group of tenants are making larger labor incomes than farm-owners in the same community indicate that the former are better farmers? What does it indicate?

8. Show that many types of leasing arrangements are, in fact, business partnerships.

9. Is share renting suited to extensive or intensive forms of agriculture? Cite illustrations to prove your point. Do you know of any cases which are inconsistent with your general statement? Can you explain?

10. What type of lease is most suited to the non-resident landlord? Why? What type does the landlord who is a retired farmer and lives near by prefer? Why? How about the small-town banker?

11. Explain the stock-share plan of renting and point out its advantages. Do you agree that this is particularly desirable for the young farmer? Why?

12. Does stock-share renting form a natural transition between wage-work and farm ownership? Explain the steps by which this would be brought about.

13. Is this equally true of ordinary share renting or the share cropping of the South? How about cash renting? Point out the difficulties of relying upon cash renting alone under present conditions in the United States.

14. If it appears that on the average the landlord makes more when he rents on some share system, why does the tenant use this

method? By the same token, why does the landlord ever consent to the smaller returns which he averages from cash renting?

15. If "247 tenant farmers made an average labor income of $870 from an investment of less than $2,500 while farm-owners with over twelve times this investment made less than half as large labor incomes," would you say that the purchase of land should be the first ambition of every young farmer?

16. What do the figures in the previous question indicate as to the rate at which economic rent is capitalized in the land values of this community? Can you explain the situation?

17. Would the stock-share type of lease be suitable to the principal kinds of farm enterprise which are carried on in your community? If so, would certain of its details require modification? How does it differ from arrangements now in vogue?

18. If you think that the stock-share lease is not practicable in your community, are the reasons for its unsuitability (*a*) the kinds of products raised? (*b*) the inability or unwillingness of landlords to participate to the necessary degree? (*c*) undesirable quality of the tenant population? (*d*) other reasons? Explain fully.

19. Is the proportion of tenancy in the United States increasing or decreasing? At how rapid a rate? How does the rate of the last census period compare with that of the one preceding? Give reasons.

20. How do the proportions in different sections of the country compare with one another? Why? Does the tendency appear to be for such differences as exist to disappear, to increase, or to remain stationary? Can you assign any reasons for this situation?

21. What is a "part owner" and why should he be distinguished in our statistics? Does he partake more of the nature of an owner or of a renter? How? What qualities peculiar to himself has he?

22. What reasons are there for presenting the statistics of tenancy in terms of the acreage held under the various tenures instead of the number of operators of the different kinds?

23. If the figures be presented in this latter form, what different conclusions is one likely to draw as to the relative prevalence of farm tenancy in different sections of the country? Does it alter one's conclusions as to a drift toward or away from tenancy?

24. Do the figures indicate that farm operation by managers is increasing or declining? Is it relatively important as compared with other forms of operation?

25. Should we put in a separate class those farm-owners whose property is encumbered with a mortgage? Show what peculiarities this class presents and how they are related to other groups.

26. What arguments can be adduced to show that farm tenancy in the United States is a progressive and wholesome condition? Do

these arguments square with the facts in your own community or is tenancy an indication that the farm operator is going backward?

27. Does the experience of other countries give ground for fear that the inevitable tendency is toward an ever-increasing percentage of non-owning farmers and harder and harder conditions for these tenants?

28. Is this equally the testimony of all the countries of Europe? If conditions in some are worse and in others better, how can you account for the differences?

29. Are conditions in America such as to make us more susceptible to such dangers or relatively to protect us from them? Give your reasons.

30. If all farmers leased their land from their respective state governments or from the federal government, is it likely that we should talk about a "tenancy problem"? Why or why not?

31. Under such a system do you think land would be better utilized or not so well utilized? Why? Would there still be an economic rent accruing? If so, should a payment of this amount be made to the government for the use of the land?

32. Under the foregoing system show how the individual farmer would be worse off or better off, as the case may be, than under existing conditions of private property in land.

33. Show how society would be worse off or better off. Mention probable administrative difficulties and abuses.

34. What is meant by "private property in land"? by ownership in "fee simple"? by an "estate" in land? May there be forms of ownership which are limited in character? Are there any which are absolutely unlimited?

35. Explain the conditions under which the landlord-tenant relation in agriculture is mutually desirable. Is it conceivable that the whole industry could be organized upon a basis of ownership of the land by a class of inactive owners (of land and possibly of equipment) and of active operators who contribute labor and management, the former receiving a small but certain and regular return upon their investment and the latter the fluctuating but larger gains of business entrepreneurship?

36. Does the foregoing condition exist in other lines of business? Does the ordinary merchant consider it essential that he should own the property he occupies? Why? Does the big manufacturing or transportation company own the landed property with which it works? Supposing that on the average the bonded debt of corporations equals the value of their real estate, what bearing does this have upon the preceding question?

37. Are there reasons why it is more essential that the farm operator should also be the farm-owner than that industrial and mercantile operators should own the land they use? Explain fully.

38. Has the land policy of the United States aimed to secure the benefits of personal ownership to the man who works the farm? What measures have been taken toward this end? Has the desired purpose been accomplished? Have some results which it was desired to avoid in fact been brought about? Was the defect in the system or in the way in which we have applied it?

39. What are the most promising means of redirecting that movement toward the intended goal?

40. Explain the purpose and mode of operation of a graduated or progressive land tax. Has such a measure ever been agitated in your state? By what interests, and with what result? If not, try to get the history of such a movement in some other state.

41. Describe the "small holdings" movement in England. What has been the effect of the European war upon farm tenure in England?

42. Is "the tenant problem" one thing or many? Is it to be solved by some panacea or are a large number of present maladjustments in the socio-economic relations of the various parties to our agricultural industry to be gradually removed by separate and partial reforms?

43. Is there some abiding source of difficulty which will probably always cause mankind to be confronted with a land problem? What is it?

PROBLEMS

1. "It is estimated that three out of every four Iowa tenant farms are leased from year to year. Short-time speculators invariably use one-year leases containing the sale clause. As the rent and price of the land advance, they are free each year to raise the rent or sell the farm. As a rule, they know very little about farming and direct or allow methods that exploit the land. On such places tenants fail to equip the farm with the necessary tools and livestock to operate it most successfully. Neither tenant, landlord, nor society is getting the highest returns from the farm." Is such a condition one which tends to grow worse or gradually to correct itself? Is it one which could be met by any practicable form of legislation?

2. "Perhaps there is no important provision in the average contract that is so neglected as the one which calls for a reward to the tenant and the landlord for the unexhausted improvements made on the farm." Point out the evil results that flow from such a situation. Is there also an injustice in not being able to charge either party for

impairment in the property? Is there any simple way of measuring the value of such items? How about slow-acting fertilizers?

3. "The principal reason why there are not more tenants renting under the stock-share lease is to be found in the tenant's and landlord's dislike for any method of renting which requires common counsel and close co-operation. The tenant chafes under the landlord's supervision, and the landlord distrusts the integrity and ability of the tenant." Do you observe similar conditions in your community? Why is it the case? How can the situation be remedied?

4. "We are still in the period of development of American agriculture when we are using much of the original equipment of American farms. It will be when present equipment has passed its usefulness that the real significance of the transition from ownership to tenantry will become apparent. Either old, tumble-down houses, the ghosts of a former prosperity, inhabited by a low-grade population willing to live in inferior quarters, will survive, or a new type of houses built for tenants will appear." Explain what this means in terms of your own community. Do you agree with the same writer's further conclusion that "alleviative policies, such as planning tenant houses or devising tenant contracts, cannot offer a permanent solution of the problem; we should seek to remove the causes that have made the appearance of a tenant class in America possible"? What are these causes? How are they to be removed? Might the last word in the quotation be changed to "inevitable"?

5. "Half of the farm lands in Texas are included in 2.7 per cent of the farms." What are likely to be the results of this condition? Is the same situation found in other states? Why?

6. "We cannot think straight on the land problem if we are going to assume that there is anything morally wrong in owning land. This, that, or the other individual landowner may abuse his power; but the general institution of private property in land is a question of expediency—not morals." Do you agree? Does the socialist? Does the single-taxer? Point out why you believe it expedient or not expedient that we have private ownership of land upon existing terms. State any modifications in the present system which you believe would be expedient.

7. (*a*) "The same progress which makes intensive farming necessary tends also to augment the numbers of those who must hire the land which they cultivate." (*b*) "Tenancy is not the normal state of man, and we have been accustomed to look on the American farmer as necessarily the owner of the acre he tilled." Is there a clash of opinion between these two statements? Explain each of them and set forth the truth of the matter.

8. "In considering the relative merits of ownership and tenancy from the standpoint of society, we should not forget that there are many men who should not be trusted with a farm absolutely under their own control. The reason they fret under a landlord is because they prefer to farm by easy and wasteful methods." What truth is there in this view?

9. "On the other hand, we have the large and stubborn fact that the best agriculture in the world is carried on under the tenancy system. The most efficient system of general farming is found in England, where the tenancy system prevails; and the most efficient growing of agricultural specialties is found on the very small gardens in the neighborhood of Paris, where the land is not generally owned by the gardener." Can you cite similar evidence in this country? Can you explain how the English tenant system has been worked out so satisfactorily? Would a similar adjustment in America be desirable?

ADDITIONAL REFERENCES

Spillman and Goldenweiser, "Farm Tenantry in the United States," *Yearbook of the U.S. Department of Agriculture*, 1916, p. 321.
Carver, *Selected Readings in Rural Economics*, chap. iii.
Taylor, "The Decline of Landowning Farmers in England," *University of Wisconsin Bulletin 96*.
———, *Agricultural Economics*, chaps. xi–xiii.
Kinnear, *Principles of Property in Land*.
Report of the Industrial Commission (1900), Vol. X.
"Proceedings of the Twenty-ninth Annual Meeting of the American Economic Association," *American Economic Review*, Supplement, March, 1917.
"Studies in Farm Tenancy in Texas," *Bulletin of the University of Texas*, 1915, No. 21.
"Systems of Renting Truck Farms in Southwestern New Jersey," *Bulletin 411, U.S. Department of Agriculture*.

TOPICS FOR SPECIAL PAPERS

The Proper Place of Tenancy in American Agriculture.
How Tenant Farming May Be Made Good Farming.
Opening the Door to Ownership of Land.
The Evils of Short Leases and How They May Be Avoided.
The Landlord as Partner.
Curbing the Speculator in Farm Land.
Absentee Landlordism.
Comparison of "Part Owner" with Encumbered Owner.

XIII. INTEREST ON FARM LOANS

QUESTIONS

1. When the farmer makes a business loan, does he do so because he expects it to add to the productivity of his farm enterprise? Is money productive? How does he expect to make the money a means to increased production?

2. Does his willingness to pledge certain security and obligate himself to make certain interest payments depend upon his estimate of the technical possibilities of certain capital-goods?

3. Would it be correct to say that the demand for capital depends upon the opportunities for productive use of certain definite capital-goods in conjunction with the other factors of production?

4. Does the borrower know that these uses will actually prove profitable? Upon what, then, does he base his decision to demand a certain amount of capital at a given interest rate?

5. In general, should it be said that the demand for agricultural capital in the United States has been strong? Why? What effect has this tended to have upon interest rates?

6. Is the tendency for the demand for capital in agriculture to increase or decrease in recent years? Why?

7. If some forms of capital-goods are more effectual in increasing the productivity of agricultural labor, which are the ones which determine the farmer's demand for capital?

8. Are our general principles of diminishing utility and marginal uses applicable here? May changes in technique bring about sudden readjustments of our demand for capital and of the wants which fall along the margin? Give several recent illustrations.

9. Does the principle of substitution enter into the determination of the farmer's demand for capital? How?

10. When we speak of marginal demand for capital, do we admit that there are other less pressing demands for capital which are precluded from any active part in the rate-making process? What is the force that excludes these submarginal desires for capital and locates the particular margin on our demand schedule?

11. Is capital ever a free good? Why?

12. Does capital have a cost of production? What is its cost of production?

13. Analyze as carefully as you can the forces which make for a high cost of producing agricultural capital; a low cost. Has the supply of agricultural capital in America been abundant and cheap or scarce and high? Why has this been the case?

14. When we speak of the supply of agricultural capital, do we mean to imply that it is supplied by the farming class? Is what the farmers themselves accumulate a considerable factor in the situation?

15. What circumstances tend to direct a generous share of the general capital supply of society toward agricultural uses? In general, has the farmer had ready access to these outside sources of supply? Give several concrete cases to illustrate, and explain carefully.

16. If some persons are so wealthy that they are readily able to put aside something for the capital fund, and some are so frugal by nature that they find it relatively easy to save part of their income, and others are so improvident or have incomes so little above the mere necessities of life that saving is extremely difficult, to which of these costs of saving does the interest rate correspond? Why?

17. Does a high standard of living tend to keep the interest rate up? Does a high cost of living? How?

18. Do you think that the development of industrial insurance systems has any effect on the interest rate? keeping savings banks open all night in industrial centers? baby bonds? postal savings? Explain each.

19. Show what besides the market price of capital-use is often included in the gross or contract rate of interest. Are these factors in the case of farm loans so important as to justify a large spread between gross and net interest rates?

20. Are there wholesale and retail rates of interest? middleman charges? Are these high or low?

21. Can farmers bring about a lowering of these items in their cost of borrowing? How? Does the competition of lenders tend to reduce them? Do you think the competition between the federal farm loan banks and other lenders will hasten this process?

22. Explain the advantages of the Torrens system of land transfer; the difficulties in the way of its general adoption. What is the present status of the question in your state?

23. How do rates actually paid by farmers for loans in different parts of the United States vary? Are these gross or net rates? Can you point out where rates are high because of extraordinary risk?

24. Show where and why middleman charges are high; low.

25. If it were possible to strip the gross loan rate down to the actual supply-and-demand price of capital-use, should we still find different rates of payment? Why?

26. Are there zones (similar to the "markets" for commodities) more or less disconnected from one another and having rates peculiar to themselves?

27. Does this mean that conditions of demand within one zone differ from those in another? Show how and why. Are there also different demands within the zone? If these are equalized for the whole of any given market in accordance with demands at the margin, why are not the different zones so equalized?

28. Is there one supply of capital for the whole United States, equally accessible to the borrowers of all zones or districts? Is the supply of capital more mobile than that of wheat? labor? strawberries?

29. If financial institutions were so changed as to make capital extremely mobile, would that tend to equalize the supply in all markets and bring interest rates to a parity? How? Do you know of any movement which contemplates doing this?

30. Is there a seasonal fluctuation in the demand-and-supply situation of agricultural capital which causes variation in interest rates? Is there a similar fluctuation in industrial demands for capital? Is it conceivable that a very highly developed banking system would offset these seasonal and sectional variations in such a way as to equalize demand and supply and stabilize interest rates? Can you point out how this is being done today?

31. How do you account for the rapid increase in the number of small banks in farming communities, particularly in the Middle West, in recent years? What effect do you think they have had on the farmer's method of conducting his business? Have they had any effect on his interest rates?

32. Do you believe that the reduction of the minimum capital required of national banks from $50,000 to $25,000 has had any bearing on the situation? What is the minimum capitalization of banks organized under your state laws?

33. Can you give any reason to show that the bank might be justified in charging the farmer a higher rate of interest on his short-time loan than it charges the merchant or manufacturer for similar accommodations?

34. In general how do the rates of interest upon short-time loans compare with those upon long-time loans? Why?

35. What is a usury law and why are such laws passed? Are they ordinarily effective? Why? May they be made so? How?

36. Is a more effective line of attack upon high interest rates to be found in the elimination of all unnecessary demands upon the loan fund? in the facilitating of capital accumulation? in the directing of capital toward regions now relatively undersupplied? What forms of legislation might have such aims in view?

PROBLEMS

1. "The most common complaint is to the effect that farmers have been discriminated against in the rates of interest they have been obliged to pay. While the railroads have been borrowing at from 4 to 6 per cent and the industrials at from 5 to 7 per cent, the farmer has been paying on the average around 8 per cent." Can you explain these differences in rates? Why should the capitalist single out the farmer for discriminatory treatment?

2. "Distance from financial centers is a factor affecting interest rates. Data show that the average cost of loans rises as one proceeds outward from the leading financial centers. It is believed that such variations can be considerably lessened, but the remedy appears to lie in institutional rather than individual effort." What does this mean?

3. "The interest rate is approximately 50 per cent higher in the newly settled part of the state than in the older part. In other words, the fluidity of capital is so poor as to require an inducement represented by a 50 per cent increase in advantage of movement in order that it may flow to the pioneer sections of the state." Does this appear to be a typical situation? Suppose the whole country were thus divided into two great sections with rates of 6 and 9 per cent, respectively, and our credit institutions were so improved as to secure a complete fluidity of capital. Would the interest rate fall to a uniform 6 per cent? Explain carefully.

4. It appears that in the foregoing case the farmers of the older section "are using local money, and this money is almost all obtained from private, mostly small, lenders," whereas the money in the newer sections is much of it procured through a trust company in a distant city. Are the rates mentioned, therefore, strictly comparable as interest upon capital? Should such facts be taken into account in making comparative statements of rates upon loans?

5. "In many parts of the country the farmer is charged extortionate and inexcusable rates of interest, regardless of usury laws and a decent regard for human necessities." When is an interest rate "inexcusable"? Is this question akin to the problem of just or fair prices? Can it be answered absolutely or only relatively? Is there such a thing as a "normal" rate of interest?

6. It is asserted that now for the first time in our history the West is able to finance its own crop movement. How does this come about? What does it mean in terms of the interest problem?

7. "Farmers want their personal loans to run longer than other bank patrons, as a rule. While this means a smaller amount of negotiation by the bankers to place their money, it often means that they must pass by other patrons whose more rapidly moving

businesses would enable them to pay higher rates on loans running for shorter periods. Likewise, the farmers usually repay their loans at a time of the year when bankers must handle low-rate commercial paper, if anything at all, to occupy their funds until the new demand arises from the farmers." Can you illustrate these statements from the experience of your own community? What effect do they have on the willingness of bankers to supply capital to the farmer and upon the rate of interest charged?

8. "Rural credits and capital are scarce only when borrowers are wasteful, shiftless, or untrustworthy, or when soil or climatic conditions are such as to render the loaning of money unsafe. Within my own recollection, mortgages bearing 10 and 12 per cent have been in force on Michigan farm lands—upon farms which now command a mortgage rate of 5 per cent. What has brought about this result? Nothing more than the increased productivity of the soil due to more efficient farming methods. And when the farms of our western states, where rates are now exessive, are brought to this advanced state of cultivation and productivity, a similar decrease in rates will naturally follow. In states where high rates now prevail the high rate merely compensates for the risk." Is this reasoning sound? Analyze carefully.

ADDITIONAL REFERENCES

Besides general economic texts, such as those of Marshall, Taussig, Seligman, Ely, and others, the student might consult any of the special works on distribution, notably: Carver, *The Distribution of Wealth;* Clark, *The Distribution of Wealth.*

One particular point of view is expounded in great detail in: Fisher, *The Rate of Interest.*

An excellent eclectic discussion may be found in: Cassell, *The Nature and Necessity of Interest.*

For interest rates of American farmers, consult: "Costs and Sources of Farm-Mortgage Loans in the United States," *Bulletin 384, U.S. Department of Agriculture;* "Factors Affecting Interest Rates and Other Charges on Short-Time Farm Loans," *Bulletin 409, U.S. Department of Agriculture.* (See also references at end of next chapter.)

TOPICS FOR SPECIAL PAPERS

Mobility of Capital as a Factor in Interest Rates.
The Farmer's Access to Non-agricultural Capital.
The Demand for Capital as Affected by Changing Farm Technique.
Middleman's Charges as an Element in the Cost of Loans.
High Interest Rates as a Sign of Progress.
Low Cost of Capital-Use v. Low Rates of Interest.

XIV. RURAL CREDITS

QUESTIONS

1. Is the rural-credit problem something which has come upon us suddenly in the last few years? Is the present agitation something in the nature of a reappearance of a difficulty which had been acute in the past, become quiescent, and then again broken out?

2. What was the time of the earlier manifestation of this problem? What were the circumstances which caused it to command public attention at that time?

3. Was the real trouble at that time too great difficulty in securing loans upon farm mortgages? too lavish and easy extensions of credit on western farms? Is it possible that there were several somewhat inconsistent phases of the matter?

4. What was the nature of the remedies advocated at that time?

5. Can you discern any significant change in the general outlook revealed in present-day discussions of the problem?

6. What did the Census report of 1890 show as to the purpose for which incumbrances were incurred? Point out several of the significant local or sectional peculiarities.

7. Were the loans in the main for nominally productive uses? Were these expenditures the most productive employment to which capital could be put in the United States at that time? Explain.

8. In what sense could loans made for the purpose of securing better dwellings, water supply, and the like, be said to be productive?

9. Might it be said that every effort of the farmer to make the agricultural industry more productive tended to increase its capitalization and to enlarge by so much the rural credit problem? From this point of view were we better off before we had a rural credit problem or after? Would it be good policy to check the growth of agricultural capitalization?

10. Did the farmer who increased productivity profit by the increase? Did society? Did any individuals lose? Who, and how?

11. What institutions for supplying the farmer with capital grew up in the latter part of the nineteenth century? Explain their method of operation.

12. Point out the beneficial character of their work. Indicate any abuses which were allowed to creep in or harmful effects of their operations.

13. Was the borrower the only one to suffer from the unscrupulous mortgage company? Can you draw a line between the evils of the system and the sins of those who conducted its operations?

14. Have some of the old mortgage companies survived down to the present time? Why? Are they doing the same kind of business today?

15. Do they buy mortgages with their own funds and sell them to their clients as opportunity offers or do they merely negotiate a transaction between two other parties—borrower and lender?

16. Do they issue debentures? Explain the debenture system.

17. What are the points which a mortgage company emphasizes in recommending a particular mortgage to prospective purchasers? Show the relation of these features to the desirability of the loan.

18. How does it come that life insurance companies have such large sums to invest in farm mortgages? Are there any special features about the cost of production of this capital?

19. Is the percentage of such funds which is invested in farm mortgages growing or falling off? Why? Can you explain why their lendings are very large in some sections of the country and relatively small in others?

20. How liberal is the life insurance company in the size of loan it will place on a given farm? Does this meet the farmer's needs fully? How can it be supplemented?

21. How about the rates of interest and other charges on insurance-company mortgages?

22. Explain the method followed by the insurance company in making loans. Is it entirely separate from all other rural-credit institutions or does it overlap and work through the others? Explain.

23. From the investor's point of view how does the drainage-district bond differ from the ordinary mortgage? from the debenture of a farm-mortgage company? from the mortgage he buys from his bank?

24. How does it differ from the farmer's point of view? Is it a desirable way of securing capital on a credit basis?

25. How does it come that the implement companies are in the lending business? Are they extending or withdrawing from these activities? Are their terms liberal or otherwise? Is it their own capital? If not, whose is it, and why could not the farmer borrow it direct?

26. How did the southern store-credit system come into being? Is it necessary? Is it economical? In order to get away from it, what line must be followed? In what does its strength consist?

27. Explain the "cattle bank." Do commercial bankers also lend direct upon "cattle paper"? Is there any reason for the continuance of the cattle bank as a separate institution?

28. Why do the farm mortgage bankers claim that there is need to continue to avail ourselves of their specialized services? What do

they regard as their part under a scheme of rural credit legislation? Has this been realized under the Federal Farm Loan act?

29. Show how bankers may organize the handling of cotton under the system of commercial banking already developed for other lines of business.

30. The cotton crop has been financed largely through banks in the past also, has it not? In whose hands? Wherein does the difference in the present system consist?

31. Explain the nature and purpose of a rate sheet. See how it compares with its parent, the "borrower's statement" of the regular commercial banking world.

32. What provisions of the Federal Reserve act were designed to extend the credit facilities of the farmer? Which of these is the most important? Why?

33. What is the meaning of "commodity" paper? How is it employed? Has its use benefited the farmer?

34. Have there been any proposals to change those provisions of the Federal Reserve act which related to rural credit? What changes have been made? Can you give the reasons for these changes?

35. Give a brief account of the *Landschaft* banks of Germany. Is there any other type of rural-credit institution in Germany?

36. Look up the Crédit Foncier (Herrick). What changes would be necessary to remodel our mortgage companies into such an institution?

37. Do you believe that our rural-credit problem is to be solved through a resort to co-operative agencies? Is the federal farm-loan system co-operative in character?

38. Can you see any reason why co-operative action should have a larger place in the supplying of short-time credit than of long-time credit, or the reverse?

39. What are the principal difficulties in the way of co-operative credit? Is it certain that what has been done in Europe can be done here? that it should be done here? Give particulars.

40. Are European institutions for rural credit given financial aid by the government? What reasons can you advance why our government should do so?

41. Are there valid reasons why it should not? Does it do so?

42. What is a "credit union" and how does it facilitate credit extension?

43. Is the lending of some particular state fund upon moderate terms by preference to home-owning farmers a form of state aid? Is it a desirable practice?

44. Would it be desirable for each of the states to establish a rural-credit institution after the pattern of the Missouri Land Bank?

Would it be desirable for each state to have one built upon some other pattern? Give your reasons carefully.

45. Do you see a field for state activity in extending the facilities for short-time loans? by making loans itself or by creating favorable conditions for the making of loans by regular credit agencies? Why?

46. Explain the organization of the federal land banks; the national farm-loan associations; joint-stock land banks. Show the relationship and proportion of government aid, co-operative action, and private enterprise in the system.

47. Is it likely that existing mortgage companies will transform themselves into joint-stock land banks? Why? How many new joint-stock land banks have sprung into existence?

48. Does it appear that existing farm-mortgage companies will be put out of existence by the coming of the farm-loan system? Why?

49. Does the new system give the farmer an opportunity to reduce the actual expense of making a loan to the minimum? How? Does the longer time for which mortgages may be made operate to reduce costs?

50. Does the system put the farmer in touch with cheaper sources of capital? How? Does the government guaranty have any bearing on this question? How about tax exemption?

51. Explain the method of issuing and selling bonds. Will the land banks sell these bonds direct to the public? Is there any other method of sale?

52. Explain the meaning of "amortization" and the method used in the federal farm-loan system.

PROBLEMS

1. "Our federal reserve system will undoubtedly serve as an important step in connecting farmers with outside capital, especially because of the opportunity afforded for the discounting of agricultural paper. At the same time, it is clear from the study of present sources of short-time loans to farmers that there is a large portion of our farming population that is not in a position at present to take advantage of the federal system." Explain both these propositions and show how the difficulty is to be met.

2. "The business ability and business habits of the farmer are tested when the banker asks for a statement of the borrower's business. If he is in the habit of keeping accounts and can explain the nature of his resources and liabilities and thus indicate accurately his financial standing, the wisdom of granting the desired loan as well as the proper terms thereon can readily be determined. If this information be lacking, the banker is in doubt about the safety of the loan, he is likely to charge up his uncertainty to the borrower's account in

the form of a higher rate of interest." Is it also possible that he may refuse a loan that really is worthy? What lesson does this carry for the farmer who is angry at being asked for a statement and to the one who has no records or accounts? Is it easier for the big bank or the little one to get borrowers' statements? Why?

3. "The investigations made show the need for personal credit to be more acute than for land credit. It is easy to get land credit equal to 50 per cent of the land value, but the temptation is great for the farmer to tie nearly his entire wealth in land, leaving himself little or nothing for operating capital. Being heavily in debt on his land cripples his personal credit, but he is usually worthy of personal credit." If the farmer has an equity in his land of 50 per cent or some considerable fraction of its value, would he be more or less eligible for personal credit than the man who has no property? Is commercial or short-time credit supposed to be secured in the enterprise for which the loan is made or to lean upon some outside security? Is it possible to have this situation in agriculture or is the nature of the risk too great? greater than in the case of merchants and manufacturers?

4. "The farmer can get credit for very short periods of time, but what he needs is credit extending over a period corresponding to the length of time required to bring to fruition the project for which the loan is made. In the case of dairy cows it is perhaps two or three years. For many farm operations it is nine months or a year, and the usual 90 or 120 days at the bank is too short." Do the transactions which in other lines of business are financed with 90-day loans actually liquidate themselves within that period? How, then, is it managed? Would the same plan be equally applicable for the farmer?

5. "One of the basic defects of the Farm Loan act is the fixing of the maximum interest rate by statute. The law of supply and demand will control the rate in any event, and a fixed maximum may conceivably render the act inoperative in the communities most in need of increased facilities." Do you agree with this writer? Might one logically agree with part of the statement and take exception to part?

6. "Another defect is to be found in the system of joint guaranties, putting good, bad, and indifferent securities in the same category, penalizing the good for the advantage of the inferior." Is it true that securities are pooled? What bad ones get in? Are the good penalized?

7. "While it is undoubtedly true that the adoption of a land-credit system providing for a low rate of interest and a longer term of loans repayable by amortization would enable a man of small means

eventually to become a landowner, it does not follow that farms thus acquired would be farms of profitable size or that the percentage of farm tenancy would decline." Does the lowering of interest rates effect an immediate improvement in the condition of borrowers on land security? Does it produce an equal benefit to later purchasers of land? Explain. Does stimulation of effort to become landowners seem likely to have the effect of increasing small holdings? What does farm-management study indicate as to the relative productivity of such farms?

8. "It is inevitable that lower rates for farm mortgages will result in greatly enhanced farm values. And the lower rates being brought about by legislative enactment, and not firmly based upon better crops and improved conditions on the farm, their value will be artificial and inflated. And where the man in moderate circumstances is able now to accumulate enough money to make the down payment on a contract, if land values increased 50 per cent, or doubled, his payment would not be large enough to be acceptable. Even though he were able to purchase, he would have increased interest to pay on the inflated price, as well as additional principal." Is this a valid objection to the federal farm-loan system? Explain.

ADDITIONAL REFERENCES

Herrick and Ingalls, *Rural Credits.*
Morman, *Principles of Rural Credits* (includes bibliography).
Moulton, *Principles of Money and Banking*, Part II, chap. ix.
Putnam, *The Land Credit Problem.*
Robins, *The Farm Mortgage Handbook.*
Wolff, *Co-operative Credit for the United States.*
Stewart, *An Analysis of Rural Banking Conditions in Illinois.*
Cameron, *The Torrens System.*
Kemmerer, "Agricultural Credit in the United States," *American Economics Review*, II, No. 4.
The National Conference on Marketing and Farm Credits, Report of Third Annual Session.
Hibbard and Robotka, "Farm Credit in Wisconsin," *Bulletin 247, Wisconsin Experimental Station.*
United States Investor, November 11, 1916.
Publications of the Federal Farm Loan Board.
Reports of the Federal Reserve Board.
Farmers' Bulletin 654, "How Farmers May Improve Their Personal Credit."

TOPICS FOR SPECIAL PAPERS

Causes of the Increase in Farm Mortgages Prior to 1890.
The Relation between Farm Mortgages and Free Silver.
The Populist Movement.

Present Status of the Farm Mortgage Company in the United States.
Land Mortgage Institutions in the State of ———.
Personal Credit Conditions in Your Home Community.
The Relation of Rural Credits to Better Farming.
The Fight to End Store Credit.
Efforts of Bankers to Extend Their Business with Farmers.
Achievements of the Federal Farm Loan Act.
Are Additional Institutions for Extending Agricultural Credit Needed?
The Change from Dealer's Book Credit to Bank Credit with the Federal Reserve System

XV. AGRICULTURAL WAGES

QUESTIONS

1. Is it relatively easier or more difficult to isolate and identify the share of the total returns of the industry which go to labor in the case of agriculture than in the case of a railroad company? a steel mill? a large mail-order house? a corner grocery? Why?

2. Is there a tendency to have more of the labor in agriculture performed upon a wage basis today than it was a generation ago? Why? Does this have any bearing upon the problem?

3. Regarding wages as the price paid for labor, what differences does it show as compared with commodity prices?

4. State the law of diminishing utility as applied to labor employed in agriculture. What sets the margin at which price is determined?

5. Economists refer to demand which grows out of the demand for another article as "derived demand." Is the demand for labor a case of derived demand? The primary demand is for what?

6. If labor demand is a derived demand, does its intensity depend upon the value or price of the objects of primary demand? Will the farmer hire more three-dollar-a-day labor to raise two-dollar wheat than to raise wheat which he expects will not bring more than one dollar?

7. Does the principle of substitution operate in determining the demand for agricultural labor? How?

8. Is the marginal worker one of minimum efficiency or unfavorable situation? What is marginal labor? Are they necessarily found in the same person? Are there any reasons why they are likely to coincide?

9. Does the supply of labor depend upon the number of human beings? upon the number who are available? upon the number who are both available and competent to perform the particular task? upon the number available multiplied by the degree of their competency? Are there any other factors?

10. Mention all the factors you can which influence the availability for agricultural work of residents of the United States.

11. Mention all the factors which have influenced their efficiency in that work.

12. Is our agriculture undersupplied with labor at the present time? What does that mean? How could it be remedied?

13. Certain persons in the Pacific states have urged the suspension or repeal of Asiatic exclusion laws and agreements. Would this remedy the situation? Why? If so, would it be advisable? Why?

14. Does the supply of labor depend upon its cost of production? Explain carefully. Should we try here as elsewhere to lower our cost of production by every means possible? Why?

15. In general has the supply of labor in American agriculture been scarce or abundant? The demand keen or slack? The price high or low? Are you talking of hired labor or self-employed labor? Would your answer be different in the two cases?

16. Would it be different if you are speaking of wages being high or low as compared with agricultural wages in other countries or as compared with wages in other industries in America at the same time?

17. Can a scarcity price for labor be readily corrected by drawing workers from other employments or from a region of abundance to one of scarcity? Explain both cases.

18. What noticeable changes have come about in the last few years to alter the conditions of supply of farm labor? in 1892–96? in 1917?

19. Do you think that the supply of labor in dairy work tends to be relatively more or less scarce than that in other lines? Why? That in raising truck crops? Why? In "tractor farming"? Why?

20. Does the farmer have to devise methods of farming which will enable him to offer high wages in order to secure a supply of farm labor today? What "methods of farming" does this imply?

21. Does he have to offer attractive work? How can he do so? Does he have to offer attractive living conditions? permanent employment?

22. May the skilful farmer so plan his operation as to reduce his need of workers considerably? Is this equivalent to an increase in the supply of labor? Does it have points of superiority? What?

23. Outline some of the most important of these ways of increasing the effective labor supply.

24. Is farming considered as desirable socially as other callings? more so? Are conditions undergoing a change? Why? What effect is this likely to have on the supply of labor in agriculture?

25. Are country living conditions more attractive or less attractive than city conditions to the rank and file of people? Why? Are they more or less healthful? Be very cautious until you have figures.

26. What proportion of our population must be induced to follow farm life under present organization of agriculture? Are we keeping up these supplies from within or do we have to draw upon outside resources?

27. Is it desirable to increase our supply of farm labor through immigration? Why? Through immigration from all sources? Are the reasons for your answer economic or social?

28. Do we seek immigrant labor (*a*) to make a wage class in our present agricultural industry? (*b*) as independent farmers self-employed and if possible land-owning? In the second case is the purpose to have these farmers displace the present agricultural population or to develop new lands or to reduce present areas of farms and increase the intensity of cultivation?

29. Explain the difference between nominal wages and real wages.

30. Has this difference usually been adequately kept in mind in presenting the data of farm wages?

31. Does adding the cost of country board to the farm hand's cash wage make it comparable with city wages? Why or why not?

32. Should union dues or temptations to fritter away money on trifles be taken into account in connection with the city worker? Should they be offset by some factor such as "psychic income"?

33. How about relative steadiness of employment and length of the working lifetime? accident and occupational disease?

34. In general what has been the trend of wages of hired farm help? How do you explain regional differences?

35. Should all these figures be corrected to allow for changes in general price level? Divide by the index number of general prices. What is your conclusion?

36. How has the labor return of the self-employed farmer been moving? How about his purchasing power? How has the war affected this?

37. How does the remuneration of labor in agriculture compare with that in other callings? Which group of other workers is qualitatively best suited for comparison?

38. Would you conclude that returns in agricultural and non-agricultural employments are equalized through the process of competition at the present time or are in a state of flux? Explain.

PROBLEMS

1. The account book of a New Jersey farmer of 1850 contains the following entry: "Hired Daniel McSugh for one year for $100. Rented house to William Harris for $25 per year, and pay him 50 cents per day." Can you explain these rates of wages? In 1848: "Rented house to Perry Simmons at $2 per month, and pay him 50 cents per day for a year, not including wet or bad weather. Carpenter work $1.25 per day and board." Does this throw any further light on the situation?

2. "Until recent years, the problem of farm labor in the United States was almost entirely confined to the quantity of the supply, but

during the last decade or two not only the amount of the supply relatively has almost critically declined, but the quality has almost absolutely declined, or has failed in an important degree to keep pace with the need for labor, more skill, and more intelligence." What does this mean? That was written in 1912. Do you think conditions are improving or not? Is cheap and abundant labor an absolute good? How about the farm labor in China?

3. "The agricultural element in populations has declined, and still the people are provided with food and raiment. Some of the countries have food and fiber to sell and other countries need to buy; but it is logical that the relative decline of the agricultural element must eventually reach a point at which it is at equilibrium with industrialism." Do you agree? Is it likely that this will be reached by a back-to-the-land movement or only after still further diminishing of the rural proportion? Which condition do we desire? Why?

4. "If the farm does not meet the competition of other employments, it must suffer the loss of some of its laborers. The effect of the farm to meet the competition for its labor is often apparent within a rim of country surrounding cities of considerable size." How do you think the effects of this competition would be manifest? Do you think it also possible that the city would furnish a supply of specialized or of seasonal laborers which would have the effect of reducing labor costs within this affected zone? Does the type of agriculture practiced in the vicinity of cities have any bearing on the question?

5. "The tendency among farm workers is toward a demand for average wages by persons of inferior skill or defective reliability, so that practically the difference in wage rate is not so great as in the real value of the service." Does this mean that there are conventional prices for labor? Is the tendency likely to be stronger or weaker in case the labor should become organized into unions or other associations?

ADDITIONAL REFERENCES

Besides the standard texts in general economics, the student might consult some treatise dealing especially with distribution, such as,

Carver, *Distribution of Wealth*, chap. iv.

Report of the Industrial Commission (1900), Vols. X and XI.

Carver, *Principles of Rural Economics*, chap. v.

Warren, *Farm Management*, chap. xi.

Funk, "Value to Farm Families of Food, Fuel, and Use of House," *Bulletin 410, U.S. Department of Agriculture.*

Social and economic surveys of rural communities appearing from state universities and experiment stations and the United States Department of Agriculture.

TOPICS FOR SPECIAL PAPERS

Immigration and the Supply of Farm Labor.
The Relation of Agricultural Technique to Farm Wages.
The Equivalence of Farm Wages and Those in Other Occupations.
Causes and Results of High Wages to Farm Labor.
Reconciling High Farm Wages with Low Cost of Agricultural Labor.

XVI. SOME PROBLEMS OF AGRICULTURAL LABOR

QUESTIONS

1. Is the length of the working day on the American farm such as to be a menace to the health of the workers? Does it entail enough discomfort to become a factor in wages? Does it drive workers away or discourage them from coming into agricultural employment?

2. What is the length of the working day in your neighborhood? Could farmers cut this down by shrewd management? Is there any tendency to get away from the extremely long day? How is it brought about?

3. Is a set working day of ten or nine or eight hours practicable in agriculture? Explain. Could the farm employ two shifts during rush periods? What do you know about night work in agriculture?

4. Have living conditions for the farm hand improved as fast as the standard of living has risen for the typical American farm family? as rapidly as the standard of living of wage workers in cities has risen? Why?

5. Do we have any class of agricultural workers for whom living conditions are relatively worse than anything known in agriculture in the past?

6. Does it appear to be necessary to improve the conditions of employment and of living for agricultural workers today? Why?

7. Describe some of the movements which seem to promise success in this direction.

8. Does intemperance constitute a problem of rural labor in your community? Do you believe that recent "dry" legislation has lessened the evil for the country as a whole?

9. If farm hands resorted to drink because of the "barrenness of farm life," is the problem being solved by removing its cause? Is it in your experience a problem of the resident, permanent workers, or of the floating, seasonal labor?

10. Explain the nature of the accident hazard in farm work. What proportion of this risk could be eliminated by proper preventive measures? Are there still considerable hazards inherent in the occupation? Do they tend to grow more or less extensive with the development of the business?

11. Are there any "occupational diseases" connected with agriculture? Is the general health risk higher or lower than for city dwellers? What are the possibilities in this direction?

12. Do state labor departments have jurisdiction over agricultural labor? Would more activity in this direction be desirable? Explain.

13. Explain the advantages and shortcomings of private labor exchanges as a means of distributing the farm-labor supply. Look up the work done by public agencies in your state; by the United States Bureau of Immigration. Is such public activity extending?

14. Describe the Japanese "contract" system of handling agricultural labor. What are its good points? its evils? Do you know of the same system being used by other classes of workers?

15. Could Italian, Greek, and similar labor groups be utilized without the intervention of the padrone? Are there abuses in the system as now operated? Could they be removed by requiring all padrones to be supervised by state agents in a manner similar to that used by some states with private employment agencies?

16. Is women's labor in this country increasing or decreasing? Is there a proper and wholesome field for women's labor in farm work? for labor other than that of the women and girls of the farm family?

17. Is there harmful use of the labor of (*a*) American women, (*b*) immigrant women, (*c*) negro women, in agriculture today on a large scale?

18. If so, could our labor laws be so framed as to reduce the evil? as entirely to eliminate it? Why?

19. Is there a type of child labor in agriculture which is normal and beneficial? Some which is improper and harmful? Give particulars.

20. Describe the child-labor conditions in your own section and what action if any is taken to safeguard the child.

21. Explain the worst instance of child labor with which you are acquainted and outline the measures which would be necessary to cope with cases of this sort.

22. Show the relation of the question of child labor to the educational system. What effect does this have upon the future labor supply?

23. Are there any distinctly agricultural workers' unions in the United States today? Are agricultural workers being absorbed into other general labor organizations? What ones?

24. What is the general labor philosophy and policy of the organizations which are getting a foothold among rural workers? Is it a correct and wholesome effort to improve the condition of the worker through proper and feasible means?

25. Does labor organization take hold on regular or itinerant workers in agriculture? To what extent has it appeared in your section?

26. Does the history of older agricultural regions seem to indicate that labor organization is bound to come eventually? Why?

PROBLEMS

1. "Recently the wages of orange-pickers were raised to $2.25 per day. They now demand $2.50. I.W.W. leaders seem to be responsible for the agitation. Mexicans, Japanese, Filipinos, I.W.W., ask for the same wages, regardless of the number of boxes picked per day." This applies to conditions of March, 1917. Explain the economic issues involved. The dispatch continues: "Unless new labor can be secured from other points, no doubt total shipments will be affected to a considerable extent." Trace the results in that case.

2. It was expected that employers would fight the advance demanded in the foregoing case. What will determine the outcome of such a struggle? "I know of farmers who shut down operations this year because they could not break even, whose men were riotous and saucy for fifty dollars a month; whose same men came back crying for their old jobs at thirty dollars after the farmer had been compelled to sell out. When unskilled farm labor exceeds fifty dollars a month, I defy you to break even—I don't care what you are raising: apples, potatoes, wheat, barley, corn, or milk." Does this shed any light on the problem?

3. "The farmers' wives do their share of the work. In 26 per cent of the families the women work in the fields during the rush seasons; in two-thirds of the families they help milk and do the chores." Is this "their share of the work"? Is the question one of morals, economics, social standards, health, or what?

4. "Even the 'desirable' immigrant from Northern and Western Europe who brings with him on an average $55 can at best only obtain employment as a farm hand, which depends primarily on the demand for farm labor, and here he is confronted by the fact that the American farmer cannot even keep his own sons on the farm." Does this indicate that the farm-labor market is over-supplied? Explain.

5. "There is not the intense competition for place among men in the country that there is in the city. In the industrial and commercial world positions are graded so that there is always a more desirable one just ahead. There is no place where one can stop to take a breath without fear that someone will step in ahead of him. But the farmer may become old-fashioned and yet make a good living. He has very little need to fear that someone else can crowd him out if he does not want to go." Is this true? Is it a desirable or an undesirable condition? It was written as a partial explanation of the lower death-rate in the country. Would this have any bearing on your answer?

ADDITIONAL REFERENCES

For additional references, see preceding chapter.

TOPICS FOR SPECIAL PAPERS

A Plan for Shortening the Labor Day through Better Management.
The Proper Restrictions upon Child Labor in Agriculture.
How to Reduce Farm Work Accidents.
Harmful Results of Women's Field Work and How to Check It.
Living Conditions of Farm Laborers in ——— County (or other district).
Improving the Distribution of Seasonal Labor in Agriculture.

XVII. PROFITS IN AGRICULTURE

QUESTIONS

1. Distinguish "pure" profits from other expressions in which the term is used more loosely.

2. What is meant by speaking of profits as the "residual" share in the distributive process?

3. Does the ordinary farmer think of a distinction between his labor return and something to be labeled "profits"? Why not? Would it make his farm operations more intelligent if he did?

4. When extraordinary returns upon a farm enterprise are secured, to what does the farmer ascribe the excess? Is he correct in doing so? Why?

5. Is the amount of profits determined on the principle of price? If so, what are the supply and demand factors involved?

6. Do pure profits accrue only to the owner (or controller) of capital? Explain carefully.

7. Have farmers secured a special return—profits—as a result of the European war? Is this a chance profit? Has it had any element of foresight? If so, is it still profits? Is there any element of monopoly gain?

8. Is agriculture ordinarily a field for the creation of profits? of monopoly profits? Why? Is it possible to have some element of monopoly gain in farming? other than ownership of scarce natural agents? of unusual labor abilities?

9. Would it mean anything to say that profits are derived from business enterprise solely and not from technical operations as such? What is meant by enterprise or entrepreneurship?

10. Does business enterprise always entail risk? Are losses, then, a part of the general phenomenon of profits? May we call them negative profits?

11. Are the risks which attach to agriculture the sort which give rise to profits? Explain.

12. Are farmers as a class inclined to be venturesome in their business operations? Be extremely discriminating in your answer.

13. Does the willingness to assume risks benefit the one who does so? Temporarily or permanently?

14. Does it benefit the public? Temporarily or permanently?

15. Can you show any relationship between profits and progress?

16. Does the evidence seem to show that American agriculture keeps close to a no-profit basis? If so, would this be a reason for

congratulation of ourselves as a nation? Why? A cause of anxiety? Why?

17. Does it appear that profits appear more often or in larger volume in industrial or mercantile enterprises than in agriculture? Is this because of the nature of the business or because of the kind of persons who are engaged in it? Does the character of the people reflect the character of the business?

18. Do you see any reason to suppose that changes are coming in the organization of the farm business which are likely to alter its profit-rendering possibilities?

19. Are the possibilities of securing profits from a business limited in accordance with the opportunities of introducing new efficiencies of organization?

20. Are these in turn limited by the existence of a machine technique? Is machine equipment taking a more important place in agricultural industry today?

PROBLEMS

1. "On the average, the farmers who hired the most help made the largest labor incomes. Those who directed less than $150 worth made no more than hired men's wages. The average labor income of those who directed over $800 worth of labor was $1,194." What does "labor income" mean in the vocabulary of the farm-management survey? Do you find an element of profits added to the wages of the farmer in the cases cited here?

2. "The gleaning of profits consists simply in utilizing natural resources, the labor of other men, or units of capital with a higher net productivity than others can. Such superior directive ability is possessed in differing degrees by different men, and, also, the ability to get hold of these other productive agents depends upon various factors many of which are institutional in their nature, such as hereditary distribution of wealth." Does the farmer's profit depend upon his ability to utilize much capital, many men, and extensive acreage (or highly productive land) up to the maximum productivity or at least a better than average performance? Does it depend upon his financial ability to get control of these things? If he has the ability, can he get the use of other persons' property?

3. "In this war crisis the farmers have shown themselves just as unscrupulous in taking advantage of the extremity of others as a means of securing fat profits for themselves as any coal baron or trust magnate ever was." Are some profits legitimate and others not? If so, where is the line to be drawn?

TOPICS FOR SPECIAL PAPERS

Profits Which Grow Out of the Lowering of the Cost of Production of Farm Products.
Personal Qualities Related to Profits.
Institutional Factors in the Obtaining of Profits in Farming.
The Emergence and Elimination of Profits.
Landowner v. Worker as Claimant to Profits.

SYLLABUS

It was explained in the preface to *Agricultural Economics* that "the decision to use the fourfold division into consumption, production, exchange, and distribution grew out of a desire to make the book most serviceable to present users, rather than out of any personal devotion to conservative ideals in the matter of economic exposition." For such teachers as might desire to follow another order of presentation, I have here sketched an outline syllabus of a course organized upon a different and, I believe, a better plan.

I strongly feel that it is worth while to begin with chapter i (even in those courses in which only a short time is available) in order that the student may get his problem in its larger setting before going on to the study of its details. Of course much is glossed over in this first survey because nearly all of the remainder of the subject is implicit in the general statements of this introductory chapter.

After the idea has been made clear that the farmer as economist is seeking to learn how to administer his affairs in a world organized on a basis of price, it is well to go at once to a study of the general principles of value and price. These are next applied to the cost-goods with which the farmer must deal—land, labor, and capital. This leads into a discussion of the work of the organizer, first in the field of production, and secondly in the marketing of his product. This view of the marketing process readily dissolves into the picture of the distributive process as the outcome of a system of bargaining for the services of persons or of productive goods.

Finally the distribution of the proceeds of the industry into private incomes gives us the condition which determines the possibilities of consumption, and this, explained in terms of its effects upon the health, numbers, and economic motivation of society, completes our circle of thought by taking us back into the market-place where the farmer sells his products and bargains for control of the agents of production.

While references are made by chapter and selection, the instructor will no doubt find that some readings will need to be broken up and others quite possibly used in more than one connection. Where it is desired to shorten the course to the length of one semester, it will probably be found best to drop chapters vii, ix, x, and xiv, or the larger part of them. Chapter i can be treated summarily and chapter iii should not need very lengthy discussion with agricultural students.

I. Introduction—the Character of the Problem:

Agricultural economics the problem of administering price-relationships in the farming business (including its domestic aspects), chap. i.

II. The Nature of the Price-Making Process:

a) Meaning of supply and demand (chap. viii, A).
b) Nature of the market (chap. viii, B).
c) Function of the market (chap. viii, D).

III. The Factors of Production:

a) Services of land and their value, chaps. iii and xi, A.
b) Services of human beings and their value, chaps. iv and xiii, A.
c) Services of capital-goods and their value, chaps. v and xiv, A.

IV. How the Costs of Production Are Determined:

a) Entrepreneurship, chap. vi.
b) Managership, chap. vi.
c) The services of accounts, chap. vii.

V. How Prices of the Product Are Determined:

a) Markets for farm products, chaps. viii, C, D, and F, and ii, B.
b) Methods of selling, chap. ix.
c) Marketing facilities, chap. x.
d) Control and regulation, chaps. viii, E, and ix, F.

VI. Distributing the Income from Agriculture:

a) The landlord, chaps. xi and xii.
b) The capitalist, chaps. xiii and xiv.
c) The worker, chaps. xv and xvi.
d) The question of a surplus, chap. xvii.

VII. Consumption as a Part of the Economic Cycle (chap. ii):

a) The farmer's standard of living:
1) Present consumption.
2) Canons of economic consumption.
3) The difficulties in the way of a satisfactory condition { wealth / education.

b) Consumption standards of the non-agricultural population and their effects upon farming:
1) Nature of popular demand.
2) Effects on agriculture.
3) Means of altering public attitude.